

A BRIEFE
INTRODVCTION
TO GEOGRAPHY.

Containing
A DESCRIPTION OF THE
GROUNDS, AND GENERALL
PART THEREOF.

Very necessary for young students in that science.

WRITTEN BY THAT LEARNED MAN,
M^r WILLIAM PEMBLE, *Master of Arts, of*
Magdalen Hall in Oxford.

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L O N D O N,
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M DC XXXV.




To the Reader.

Gentle Reader; I here present unto thy view these few sheets, written by that learned man M^r VVilliam Pemble, I doubt not to call him the father, the child favours him so much. It hath long layn hid from thy sight, but now at length emboldned upon thy curteous acceptance of his former labours, it looks abroad into the world: It's but little, let not that detract any thing from it, there may lye much, though pent up in a narrow roome; when thou readeſt, then judge of it; Thus much may be ſaid: Though many have writ of this ſubject, yet this inferiour to none, thou may'ſt obſerve in it an admirable mixture of Art and delight, ſo that for younger Students it may be their Introduction, for others a Remembrancer, for any not unworthy the peruſall: onely, let it finde kinde entertainment, at thy hands. Farewell.



To the Reader.

Worthy Reader; I thus present unto thee
these few sheets, written by that
learned man Mr. William Temple.
I doubt not to call him the father, the
child favour him so much. It hath long
been his glory, but now at length imbedded
upon thy curious apprehension of his former labours, it
looks abroad into the world: it's for him, let not that
thrust any thing from it, there may be much, though
great up in a narrow room; when thou readest, thou
knowest it; I but wish may be said: I though many
have read of this subject, yet this is the first reason, thou
mayst observe in it an admirable mixture of wit and
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worthy the perusal: only, let it find a kinder enter-
tainment, at thy hands. I am well.



A B R I E F F E I N T R O D U C T I O N T O G E O G R A P H I E.

C H A P. I.

A generall description and diuision of Geographie.



IN **G**E O G R A P H I E is a particular description of some small quantity of Land, such as Land measurers sett out in their plots.

Chorographie is a particular description of some Country, as of England, France, or any shire or Province in them: as in the usuall and ordinary mappe.

Geographie is an art or science teaching us the generall description of the whole earth, of this especially wee are now to speake of, and also Chorography as a part under it contained: both, excellent parts of knowledge in themselves, and affording much profit and helpe in the understanding of history and other things. The parts of Geographie are two.

Generall, which treateth of the nature, qualities, measure, with other generall properties of the earth.

Speciall, wherein the severall countryes and coasts of the earth are divided and described.

Of the generall in the first place, and more at large then of the other, because it is more difficult, and hard to be understood, and yet of necessary use, for the understanding of the other. This generall tract may be parted into five particular heads.

- 1 Of the properties and affections of the earth,
 - 2 Of the parts of it in generall,
 - 3 Of the Circles of it.
 - 4 Of the distinction and diuision of it according to some generall conditions and qualities of it.
 - 5 Of the measuring of it.
- These in their order.

C H A P. II.

Of certaine generall properties of the earth.

IN Geographie when wee name the earth wee meane not the earth taken severally by it selfe, without the seas and waters. But under one name both are comprised,

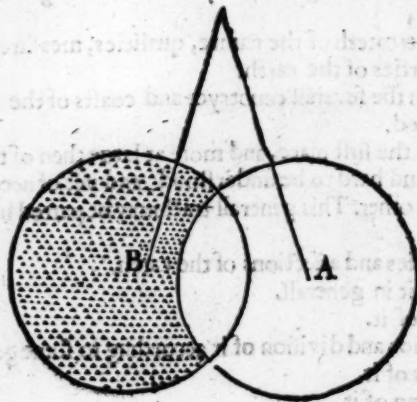
comprised, as they are now mingled one with another and doe both together make up one entire and round body. Neither doe wee dive into the bowels of the earth, and enter into consideration of the naturall qualities, which are in the substance of Earth and water, as coldnes, driness, moisture, heavines, and the like: but wee looke onely upon the out side, contemplating the greatnesse, situation, distances, measuring, and other such affections which appeare in the superficies of it, to the eyes of our bodies and mindes: These then of the earth and water together, rules are to be knowne.

The earth and the water doe make one globe, i. e. one round or sphericall body.

The naturall place of the water is to be above the earth, and so it was in the first creation of it, compassing the earth round about, as appeares Genes. 1. 9. But for the use of man and all other living creatures, God made a separation of them causing the water to sinke downe into huge hollow channells, prepared to receive it, that so the drie land might appeare above it. Notwithstanding which separation, they do both still remaine together, not covering one another as at first, but intermingled one with another, and that soe exactly as they now make but one round body, whereas at first they made two. Here therefore are two points to be proved, 1. That they are one globe. 2. That this one is round.

1 They are one globe having the same Center or middle pointe, and the same surface or convexe superficies; which will appeare by these reasons.

1 Common experience. Take a lump of earth and any quantity of water, and let them both fall downe together upon the earth from some high place, wee see that in the descent they doe not sever, but keep still together in one streight line, which could not be, if the earth and water were two severall round bodies having severall centers. As for example suppose them to bee two globes and let (a) bee the Center of the earth and (b) the center of the water; from (c) some high place above the earth hurle downe earth and water. I say the earth will part from the water in going downe and the earth will fall downe upon (d) and the water upon (e) but this is contrary to experience and *ergo* the supposition is false.

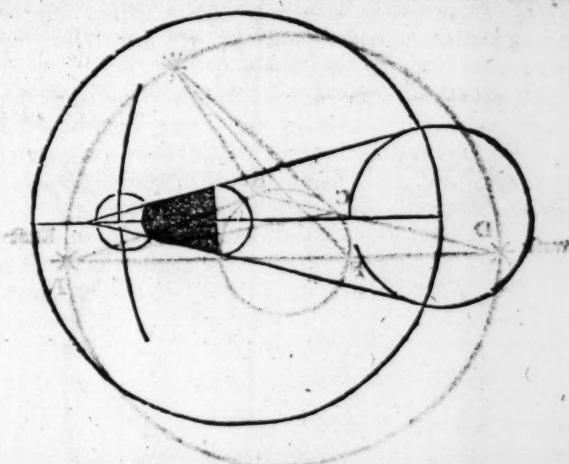


2 The shadow which in Eclipses is cast upon the Moone by the earth and the water, is but one and not two, and therefore the body is so likewise. This will appeare in the proofs of the next point, v. 2.

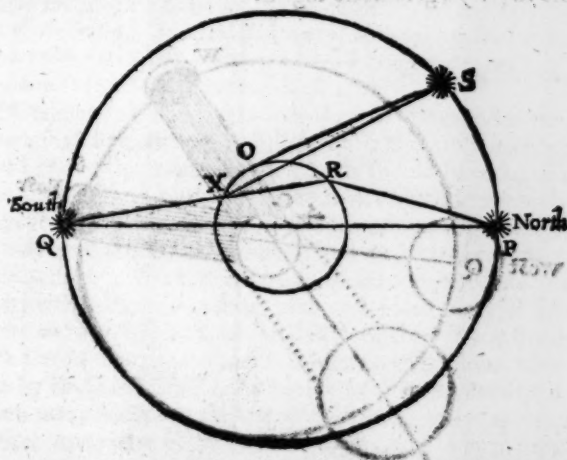
2 Thus both earth and water are one round body, not square, long, hollow, or of any other figure. This is proved by diverse reasons.

1 By Eclipses; when the earth stands just between the Sunne and the Moone,

Moone, then doth the shadow of the earth falling upon the Moone darken it wholly or in part. Now as is the fashion of the shadow, such is the figure of the body, whence it falls, but the shadow of the earth and water cast upon the Moone is round, and also one, therefore they are round and also one body.

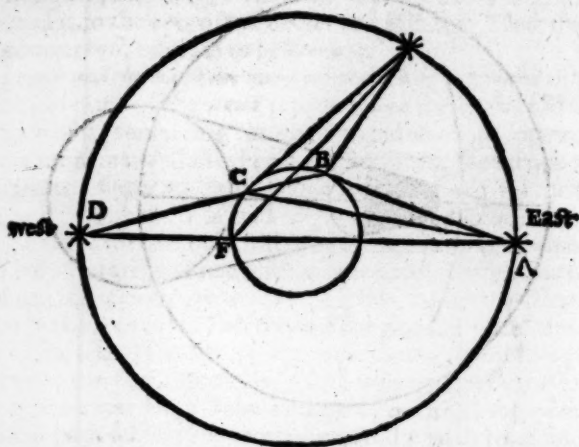


2 By the orderly and successive appearing of the stars, as mentravail from North to South, or from South to North, by sea or land. For as they goe by degrees, they discover new stars, which they saw not before, and lose the sight of them they did, which could not be if the earth were not round. As for example, let (X.O.R.) the inward Circle be the earth, (Q.S.P.) the outward, the Heaven: they cannot see the starre (S) which dwell upon the earth in (X) but if they goe Northward unto (O) they may see it. If they goe farther to (R) they may see the starre (P) but then they lose the sight of the starre (Q) which being at (X) and (O) they might have scene. Because, as it appears in the figure the earth riseth up round betweene (R) and (X).



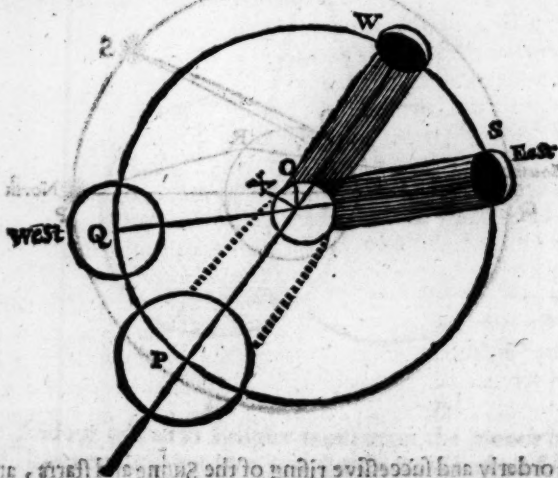
3 By the orderly and successive rising of the Sunne and starre, and setting of the same. Which appeare not at the same time to all countries, but unto one after another. As for example, let (F.C.B.) be the Circle of the earth, (D.E.A.) the Circle of the heaven from East to West, let (A) be the Sunne or a starre. When the Sunne (A) is up, and shines upon them that dwell in (B) hee is not risen

risen to them that dwell in (C) againe when he is risen higher and is come to (E) and so shines upon those that dwell in (C) hee is not yet up to them that dwell in (F.) Againe when he setteth in the West, in (D) and so is out of sight to the inhabitants in (B) he is yet up to them that dwell in (C) and (F.) Which shewes plainly the earth is round.



4 By the different observations of Eclipses. One and the same Eclipse appearing sooner to the Easterly Nations then those that lye farther West; which is caused by the bulke of the earth swelling up betwene. As for example.

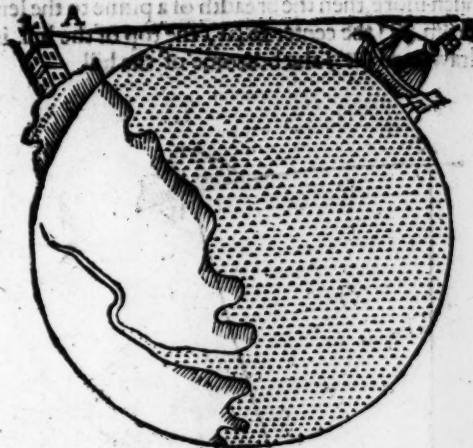
Let (X.O.) be the Circle of the earth, and the greater the Circle of the heaven from East to West. Let (P.Q.) be the body of the Sunne, (W.S.) of the Moone in the eclipse by reason of the earth betwene it and the Sunne. It is manifest that the inhabitants in (O) shall see the Eclipse before the inhabitants in (X) by certaine houres, according as the distance betwene (X) and (O) is more or lesse. They that dwell in (O) shall see it in (S) they that dwell in (X) see it not till it come to (W) a greatdeale higher.



That the water is round besides the naturall weight and moisture of it, which being apt to yeeld and run abroad, will not suffer some places to lye high, and some low, like hills, and dales, but though it be made rough and uneven by tempest, doth presently returne to their naturall smoothnesse and evennesse.

evenesse: I say besides this: it is cleare by common experience; for if wee stand on the land, and see a ship goe forth to sea, by degrees wee lose the sight of it, first of the bulke, then of the mast, and all. So also on the other side they that are at sea by degrees doe lose or gaine the sight of the Land: As for example.

Let *(A)* bee some steeple upon the land *(B)* a ship at sea: He that stands at *(A)* shall by little and little lose the sight of the ship, as shee goes out, and get sight of her as shee comes in. Both first and last hee shall have the sight of the top mast *(C)* when hee sees nothing else. Because the sea riseth up betwene his sight and the ship.



These reasons and experiments may suffice to prove the roundnesse of the earth & water; which might be farther demonstrated by shewing the falshood of all other figures regular or irregular that can be given unto it: that it is neither square, nor three-cornerd, nor Pyramidall, nor conicall or Taperwise, nor Cylindricall like a barley rowle, nor hollow like a dish, nor of any other fashion, as some have imagined it to be of. Wee come to this second rule.

2. The tops of the highest hills, and bottoms of the lowest vallies although in severall places they make the earth uneven, yet being compared to the vast greatnesse of the whole, doe not at all hinder the roundnesse of it.

Among all Geometricall figures the sphericall or the round is the most perfect, and amongst all naturall bodies the heaven is the most excellent. It was therefore good reason the most beautifull body should have the most perfect and exquisite shape. Exact roundnesse then is not found in any body, but the Heavens; the earth is round as was showed before, but not precisely, without all roughnes and inequality of its surface. There are hills like warts and vallies like wrinkles in a mans body; and that both for ornament and use. Yet is there such uniformity in this varietie, as that there is no notable and sensible inequality made in the earth by hills and vallies. No more then if you should lay a fly upon a smooth Cartwheele, or a pinnes head upon a great globe. Now that this is so, appeares by Sense and Reason. By Sense thus, if wee stand on a hill or in a plaine, when wee may discerie the country round about 15. or 20. miles; we may behold the brim or edge of the earth round about us to be in a manner even and streight, even there, where the country is very hilly, and full of mountaines. So that a far off their height makes but a little alteration and difference from the plaine countries, when wee behold all together a faire off: though when wee come neere, the alteration seemes more sensible.

By reason thus, the thicknesse of halfe the earth is (as shall be showed) shew

4000 miles; now the plumb height of the highest mountain, is not accounted above a mile and a halfe, or two miles at the most. Now betwene two miles and foure thousand, there is no sensible proportion, and a line that is foure thousand and two miles long, will not seeme sensibly longer then that which is foure thousand; as for example. Let (O) bee the center of the earth, (XW) a part of the circle of the earth which runneth by the bottoms of the hills and superficies of champion and even plaines (WO) or (XO) is the semidiameter or halfe the depth of the earth. (S) is a hill rising up above that plaine of the earth, (WS) is the plumb height of the hill. I say that (WS) doth not sensibly alter the length of the line (OW) ; for (WS) is but two miles. (WO) 4000 miles, and two to 4000 alters not much more, then the breadth of a pinne to the length of a pearch. So a line drawne from (O) the center to (S) the top of the hill, is in a manner all one with a line drawne to (W) the bottome of the hill.



The reason why the earth is round, is because the weight of the matter which composes it, is equally distributed in all directions, so that it is equally attracted in all directions, and therefore it is round. The same reason may be applied to the moon, and to all other celestial bodies, which are equally attracted in all directions, and therefore they are round.

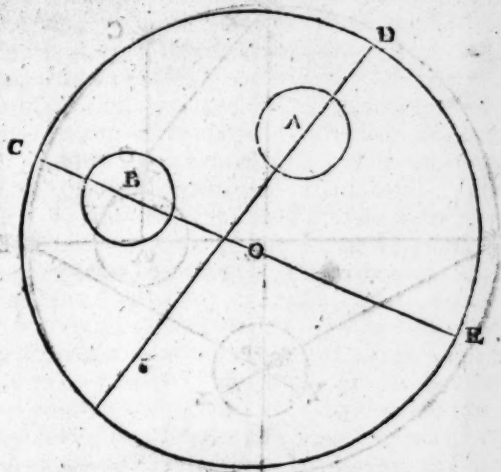
Among all celestial bodies, the Earth is the most perfect, and the most beautiful. It is the only body which is visible to the naked eye, and it is the only body which is the most perfect in its shape, and the most beautiful in its color. The Earth is round, and it is the only body which is round. The Earth is the only body which is the most perfect in its shape, and the most beautiful in its color. The Earth is round, and it is the only body which is round. The Earth is the only body which is the most perfect in its shape, and the most beautiful in its color.

The third rule.

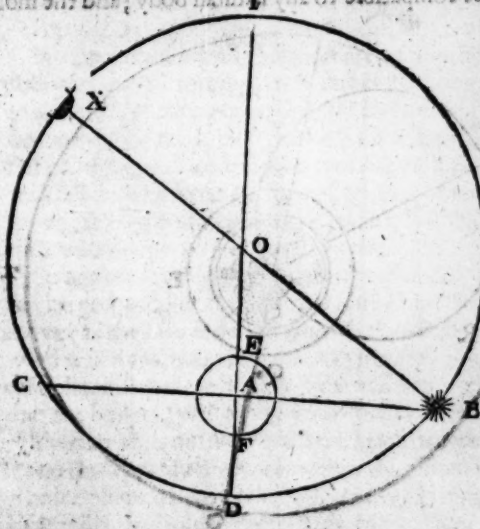
The earth is round, and it is the only body which is round. Two points are here to be demonstrated. First that the earth stands exactly in the middle of the world. Secondly that it is immovable. The former is proved by these reasons.

1. The naturall heavynesse of the earth and water is such, as they will never cease moving downwards till they come to the lowest place. Now the center or middle point of the world is the lowest place, and *ergo* they must needs move thither, as for example.

Let (O) be the center of the world, (CDE) the heavens: it is manifest that the lowest place from the heavens on all sides is (O.) Suppose the earth to be in (A) or in (B) some where out of the center, I say it is not possible (unlesse it be violently held up) that it should abide there, but it will descend till it come to (O) the middle point.



2. If the earth stood any where but in the midst we should not see half the heavens above us, as now we alway doe, neither could there be any Equinox, neither would the dayes and nights lengthen and shorten in that due order and proportion in all places of the World as now they doe; againe Eclipses would never fall out but in one part of the heavens, yea the Sunne and Moone might bee directly opposite one to another and yet no Eclipse follow; all which are absurd. As for example, let the center of the World be (O) let the earth stand in (A) a good way distant from the center, it is manifest, that the greater halfe



of the heavens (CIB) will alwayes be above, and the lesser halfe (CDB) below, which is contrary to experience. Thence also it followes that the dayes & nights will never be equal; for the Sun (B) will be alwayes longer above the earth while it he moves from (B) to (C) then below, moving from (C) to (B.) Again, the Sunne (B) may stand just opposite to the Moone (X) and yet no Eclipse follow, the earth which makes the Eclipse, standing out of the midst.

In this figure it is manifest; that the earth in the midst, cannot move by any streight motion, upward toward (*N*) or sideward toward (*M*) or any other way out of its proper place, and therefore that opinion of *Copernicus* and others, that the earth should move round once a yeere in such a Circle as (*M P R*) is most improbable and unreasonable. And rejected by the most

But although it cannot move streight; it may move round. For though it be a marvellous great body of unconceivable weight, yet being equally poised on every side, there is nothing can hinder its circular motion: As in a Globe of Lead, or any other heavy substance, though it were 40. fadome in compasse, yet being set upon his two Poles, it would easily be turned round even with a touch of ones little finger. And therefore it is concluded, that this circular motion is not impossible. The probability of it is thus made plaine. The whole circuit of the heavens, wherein are the fixed stars is reckoned by Astronomers to be 1017562500 that is, a Thousand and Seventene Millions of miles, five hundred sixty two thousand, and five hundred miles. Let this be the compasse of the Circle (*N A O Z*.) So many miles do the heavens move in one day, till the same point come to the place from whence it went; as till (*N*) move round, & come to (*N*) againe. This being the motion of the whole day 24. houres; how many miles will (*N*) move in one houre? it will move 42398437 and a halfe. i. e. Forty two Millions three hundred ninty eight thousand, foure hundred thirty seven miles and an halfe. So many miles will (*N*) move in one houre, from (*N*) to (*M*). A motion so swift that it is utterly incredible. Farre more likely it is, the circuit of the earth (*A S X V*) being about 24000. i. e. twenty foure thousand miles more or lesse; it should move round once a day. For then one points as (*X*) should move in one houre from (*X*) to (*V*) but a thousand miles, which motion although it be swifter then any arrow or bullet from a Canons mouth, yet is it incomparably slower then that of the heavens, where so many Millions are posted over in an houre.

Now for the saluing of all the celestiall Phenomena, or appearances, the truth is the same, if wee suppose the earth to move, as if wee beleevē it to stand still. The rising of the Sunne and Starres, the motions of all the Planets, will keepe Correspondence that now. Nor neede wee feare jogging, or that steeples and towers would totter downe, for the motion is regular, and steady without rubbes, and knocks. As if you turne a globe about, it will goe steadily, and a fly will set fast upon it, though you move it apace. Besides the whole body the ayre is carried about with the whirling of the earth, so that the earth will make noe winde, as it turnes swiftly about; as a wheele will, if it be turned apace.

Notwithstanding all this, most are of another opinion, that the earth standeth still without all motion, rest rather befitting so heavy and dull a body then motion. The maine reason brought to establish it is this. Let a stone be thrown downe out of the ayre from (*W*.) if the earth stand still, it is manifest it will fall upon (*X*) just under it; as wee see it doth. By common experience, a stone will fall downe from any height upon the place wee aimed at, but let the earth move, the stone will not light upon (*X*.) but some where else as on (*S*.) for (*X*) will be moved away, and gone to (*V*.)

So againe let two peices of ordinance that will shoote at equall distance be discharged one just towards the East, the other towards the West; if the earth move (as they say it doth) towards the West, the bullet that is discharged Eastward will fly farther then that Westward. For by the contrary motion of the earth he will gaine ground. But experience hath proved this to be false, shewing that the bullets, will both fly at equall distance.

To salve this, answere is made that the earth by its swift motion carries with it and that steadily not onely all bodies resting or moving upon it, but also the whole Sphere of Aire (*W E Q*) with all things whatsoever that are moved in it naturally or violently, as clouds, birds, stones hurled up or downe, arrows,

bullets, and such like things violently shott forth : as may appeare in the figure.

The fourth rule.

4 The earth, though it be of exceeding great quantity being considered in it selfe, yet being compared to the heavens, especially the higher spheres, is of noe notable bignes, but may be accounted as a point or pricke in the midst of the world.

That the earth is noe bigger then a point or pinnes head in comparison of the highest heavens will easily appeare unto us, by these reasons.

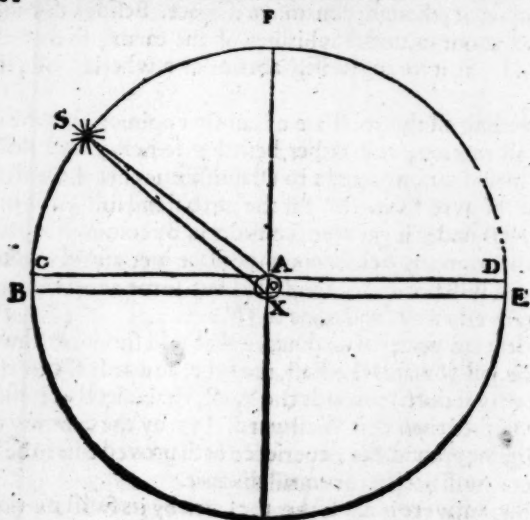
1 The stars which are many times bigger then the earth, seeme yet to us to be no bigger then a great pinnes head, or such like quantity ; therefore much lesse shall the earth appeare to be of any sensible magnitude.

2 Wee alwayes beholde halfe the heavens above us, which could not bee if the earth had any sensible proportion to the heaven.

3 All observations of hights and distances of the coelestiall bodies, which are made on the superficies of the earth, are as exact, and true, as if they were made in the very center of the earth. Which were impossible, unlesse the thicke- nesse of the earth were insensible in regard of the Heavens.

4 All Sunne Dials which stand on the superficies of the earth, doe as true- ly cast the shaddowes of the houres, as if they stood in the Center. As for example.

The starre (*S*) appeares like a point or pricke to them that dwell in (*A*) wherefore the earth (*O X*) will appeare much lesse to the sight of him that should behold it from (*S*), nay it would not bee seene at all. Again, halfe the Heavens (*B F E*) are alwayes seene to them that dwell in (*A*) wanting some two minutes, betweene (*E D*) and (*B C*) which difference is altogether insensible. Again, if wee observe the hight of the starre (*S*) above the Horizon (*B E*) it will be all one namely (*B S*) whether wee observe it in the top of the earth, in (*A*) or in the middle in (*O*). For, (*A*) and (*O*), are so little distant one from another, that (*A S*), and (*O S*) will bee parallel lines, and bee esteemed but as one line. The fourth reason concerning Dials, is cleare by the framing & construction of them : wherein either the lower end of the Cocke (or Gnomon) whereat all the houre lines meet, or the upper end and knobb (as in many Dials) is supposed to be the Center of the earth.



CHAP. III.

Of the parts of the Terrestrial Globe.

THe properties of the earthly Globe have beene handled in the former chapter wee come now to the parts, which are two in generall.

{ Earth } Both containe under them more particular parts to bee
{ Water } knowne.

The more notable parts of the Earth are these.

1 A Continent or maine Land, or as some called it firme Land, which is not parted by the sea running betweene.

2 An Iland, a land compassed about with waters.

3 A Peninsula, a land almost surrounded by waters save at one place, where it joynes by a narrow necke of land to the Continent; this is also called Chersonesus.

4 An Isthmus, a streight necke of land which joynes two countreis together, and keeps the sea from compassing the one.

5 A Promontorie or head land running farre out into the sea like a wedge.

6 A Mountaine

7 A Valley

8 A Champion plain

9 A Wood

All easie to bee knowne without any definition.

The more notable parts of the Water are these

1 Mare the Sea, or Ocean, which is the gathering together of all waters.

2 *Fretum* a streight or narrow sea running betweene two lands.

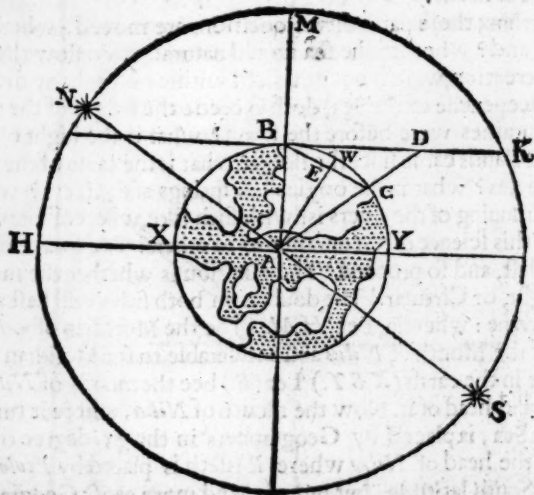
3 *Sinus* a Creeke, Gulfe or Bay, when the sea runnes up into the bosome of the land by a narrow entrance but openeth it broader when it is within; if it be very little it is called a Haven, *Portus*.

4 *Lacus* a Lake, a little sea within the land having rivers running into it, or out of it, or both. If it hath neither it is called *Stagnum* a standing Poole, also *Ralm*; a fenne.

5 *Fluvius* a River, which from the pleasantnesse is also called *Amnis*; from the smalnesse of it *Rivus*.

Now concerning these parts divers questions are moved; whether there be more Sea or Land? whether the sea would naturally overflow the land, as it did in the first creation, were it not withheld within his banks by divine power? whether the deepenesse of the Sea, doth exceede the height of the mountains? whether mountaines were before the flood? what is the hight of the highest hills? whether Ilands came since the flood? what is the cause of the Ebbing and flowing of the Sea? what is the originall of springs and Rivers? what manner of motion the running of the rivers is? with such like, whereof some belong not so properly to this science of Geographie as to others. We speake onely a word or two of the last, and so proceed. The question is whether the motion of the rivers be streight, or Circular. The doubts on both sides will best appeare by a figure first drawne: wherein, Let (*HMO*) be the Meridian of *Alexandria* in *Egypt*, or of the Mouth of *Nilus* and answerable to the Meridian of the Heavens. Another in the earth (*XYT*). Let (*B*) bee the mouth of *Nilus*, and (*C*) the fountaine and head of it. Now the mouth of *Nilus*, where it runns into the Mediterranean Sea, is placed by Geographers in the 31. degree of the North latitude; and the head of *Nilus* where it riseth is placed by *Ptolomeus* in 11. degree of the South latitude, but by latter and more exact Geographers in the 14. degree of the Southern latitude, so that the distance betweene the founts and *Os*, i. e. between (*C*) and (*B*) is 45. degrees of a great Circle, which after the usuall account makes 2700. one eight part of the earths circumference. The question now is, whether the running from (*C*) to (*B*) runne continually downward in a streight line, or circularly in a crooked line. If it runne

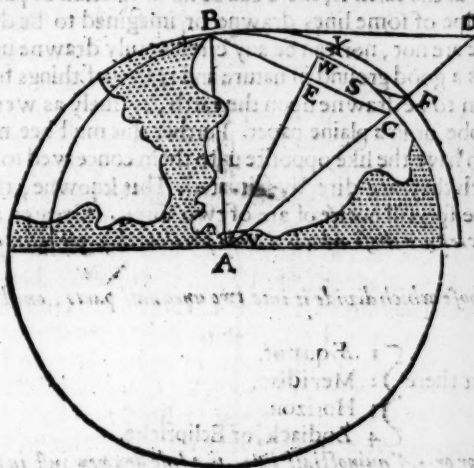
in a streight line, as is most agreeable to the nature of the water, it must move either by the line (CEB) or by the line (DB). By the line (CEB) it cannot move: for when it is come to (E), it will stand still. Because from (E) to (B) it must move upward, if it move at all, which is contrary to the nature of water. If therefore it move by a streight line it can be no other, but (BD), and so from (D) to (B) it shall continually descend; for of all places between (D) & (B) (B) is the nearest to (A). But then the fountaine must not be in (B) but higher in (D) which seemes altogether improbable or impossible. For first the line (AD) would be notably and sensibly longer then the line (AB). For the compasse of the earth being about 24000. Miles, and the semi-diameter (AB), or (AC) 3828. miles, the line (CD) would bee 1581. miles, which cannot be true, if, as we have proved before, the earth be round, and that the highest hills make no sensible inaequality. Again they that dwell in (D) should see the North Pole Starr (N) as well as they that dwell in (B), which also is false. So then the river cannot runne either by (EB) or (DB); Runnes it then circularly by the line (CWB)? This seemes probable, and the rather because hereby a reason of the originall of Rivers might more easily bee given. For the fountaine (C) lying even with the superficies of the Sea, the water may easily passe through the hollowes of the earth, and breake out at (C) without ascending. But here also are some difficulties: for first wee find by experience that the fountaines of most rivers, and those great ones too, lie sensibly higher then the plaine surface of the Sea. Again, if the river move directly round, what should bee the cause that begins and continues this motion? It is a motion besides the nature of the water, and therefore violent, what should drive it forward from the Sea to (C), and from (C) to (B)? When the water is at (C), or (W), it is as neere to the Center (A) as when it is at (B), and therefore it should seeme with more likelihood it would stand still; for why would it strive to goe further, seeing where it is, it is as neere to the Center as whither it runnes. Or if some violence doe drive it from (C), towards (W) yet (as it is the nature of violent motions) the further it goes the slower it will run, till in the end it stand still, if there be no advantage of ground to helpe it forward,



As a bowle throwne downe a hill runnes easily and farre if it once bee set a going; but throwne upon the ice (an even place) it will without any let at last stand still. Answer may be made hereunto, that although there be no advantage of the ground, yet the water will still move forward from (C) to (B) because the water that followes, pulseth forward that, that runnes afore. Which
answere

answers will stand, when a good cause may be shewed, which forcibly driveth the water from the Sea unto (C) and out of the fountaine (C) considering that (after this supposition) they lie both in the same circular superficies. Wherefore seeing we cannot without any inconveniency suppose it to move by any of these lines either streight as (BC) or (BD,) or circular as (BHC) let us enquire farther.

The most likely opinion is, that the motion of the water is mixt; neither directly streight, or circular, but partly one, partly the other. Or if it be circular, it is in a circle whose center is a little distant from the Center of the whole globe. Let us place fountains then neither in (C) nor (D) but in (F) I say the water runnes either partly streight by the (FS) and partly circular, from (S) to (B) which motion will not be inconvenient, for the water descending continually from (F) to (S) will cause it still to runne forward; or else wholly circular in the circle (FAB.) And this is most agreeable to truth. For so it shall both runne round as it must doe if wee will escape the otherwise unavoidable inconveniences of the first opinion, and yet in running still descend, and come neerer to the Center, as is most befitting the nature of water, so that wee need not seeke for any violent cause that moves it. Let us then see what is the height of (F) the fountains of *Nilus*, above (C) that is (B) the mouth or out-let of it



into the Sea. The usuall allowance in watercourses is one foot in descent for 100. foot in running, but if this be thought too much because water will runne away upon any inequality of ground, for every 500. foot allow one for descent, and so much we may with reason, in regard of the swiftnesse of many rivers, yea the most, which in many places runnes headlong in all places very swiftly (especially *Nilus* whose cataracts or downefalls are notable) which cannot bee without some notable declivity of the ground. Thus then the whole course of *Nilus* being 3700. miles from (F) to (B) the perpendicular or plumb descent of it (CF) will bee 5. miles. And so high shall the fountaine stand above the mouth, and the surface of the plaine Land (for rivers commonly arise at foot of hills) which is (BXF) swell up above the surface of the Sea (BHC) or (BT) which height of the Land above the Sea although it be greater then is the height of the highest mountaines above the plaine Land, yet it is nothing in comparison of the whole Earth. And this being granted (as with most probability of reason it may) it will appeare that God in the beginning of the world imposed no perpetuall violence upon nature, in gathering together, the waters into one place, and being so gathered, in keeping them from running backe to cover the earth. At the first so soone as those hollow channells were

prepared, the water did naturally slide downe into them, and out of them without any artificial power they cannot returne. For if the Sea (*B*) should overflow the land towards (*P*) the water must ascend in running from (*B*) to (*P*) which is contrary to its nature. Certainly the midland countries, whence springs of great rivers usually arise, doe ly so high, that the sea cannot naturally overflow them. For as for that opinion that the water of the sea in the middle lies on a heape higher then the water that is by the shore, and so that it is a harder matter to find out of a Haven to sea ward, then to come in (because they goe upward:) this is an empty speculation contrary to experience, and the grounds of nature it selfe, as might easily bee shewed. All the difficulty that is in this opinion is to give a reason how the water mount up to (*P*) and whence the water comes that should flow out of so high a place of the earth, wherein I thinke as in many other (sortes of nature we must content our selves with ignorance, seeing so many vain conjectures have taken no better success).

CHAP. III.
Of the circles of the earth.

IN a round body as the earth is, there can be no distinction of parts, and places, without the helpe of some lines drawne or imagined to be drawn upon it. Now though there are not, nor can be any circles truly drawne upon the earth, yet because there is a good ground in nature and reason of things for them, wee must imagine them to be drawne upon the earth, as truly as wee see them described upon a Globe or in a plaine paper. Further this must bee noted, that all circles on the earth have the like opposite unto them conceived to be in the heavens, under which they are directly situated. This knowne, the circles that wee are to take the speciall notice of are of two sorts, Greater and Lesser.

The greater circles are those which divide this earthly globe into equall halves or Hemispheres.

The lesser are those which divide it into two unequall parts, one bigger, another lesse.

Of the former sort there are foure, the

- 1 Equator.
- 2 Meridian.
- 3 Horizon.
- 4 Zodiack, or Eclipticke.

1 The Equator or Equinoctiall line, is a line drawen just in the midst of the earth, from East to West, which compasseth it as a girdle doth a mans body, and divideth it into two equal parts, one on the North side, the other on the South. The two points in the earth that are every way farthest distant from it North, and South, are called the Poles of the earth which doe directly stand under the two like points in the Heaven, so called because the Heaven turnes about upon them, as the Earth doth in a Globe that is set in a frame. This circle is of the first and principall note and use in Geography, because all measurings for distances of places and quarters of the earth are reckoned in it, or from it. It is called the Equinoctiall because when the Sunne in the Heavens comes to be directly over that circle in the earth, the dayes and nights are of equall length in all parts of the world. Mariners call it by a kind of excellency, *The line*. Vpon the Globe it is easily discerned being drawen bigger then any other circles from East to West, and with small divisions.

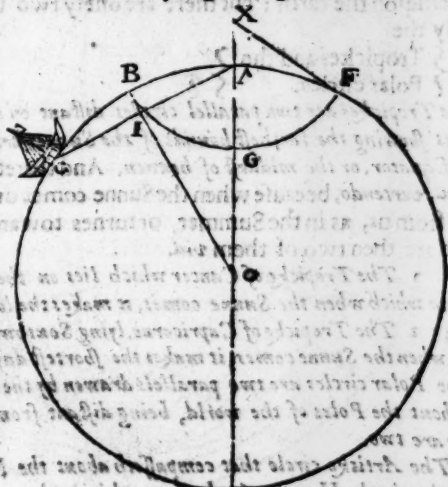
2 The Meridian, is a line that is drawne quite cross to the Equinoctiall, and passeth through the Poles of the Earth, going directly North and South. It is called the Meridian, because when the Sunne stands just over that circle, it is called *Meris*, i. e. noone day. It may bee conceived thus: At noone day, when it is just twelve a clocke, turne your face towards the South, and then imagine with your selfe two circles drawen, one in the Heavens, passing from the North just over

your

your head through the body of the Sunne downe to the South, and so round vnder the earth up againe to the North Pole. Another upon the surface of the earth passing through your feet just under the Sunne, and so compassing the earth round till it meet at your feet againe, and these are Meridians answering one to another. Now the Meridian is not one onely, as was the Equinoctiall, but many still varying according to the place wherein you are, as for example: At London there is one Meridian, at Oxford another, at Bristol another, and so along Eastward or Westward. For it is sooner at London sooner then at Oxford, and at Oxford sooner then at Bristol. Upon the Globe there are many drawn, all which passe through the Poles, and goe North and South, but there is one more remarkable then the rest, drawn broad with small divisions, which runneth through the Canary Islands, or through the Islands of Azores Westward of Spaine, which is counted the first Meridian in regard of reckoning and measuring of distances of places one from another: for otherwise there is neither first nor last in the round earth. But some place must bee appointed where to begin the account: and those Islands have beene thought fittest, because no part of the World that lay Westward was knowne to the Ancients further then that: and as they beganne to reckon there, wee follow them. This circuit is called in Greeke *Meridies*. *De*

3. The Horizon is twofold. $\left\{ \begin{array}{l} \text{Sensible or appearing.} \\ \text{Intelligible or true.} \end{array} \right.$

The Sensible or appearing Horizon is the space of the earth so farre as in an open plane, or upon some Hill a man may see round about him. The brim or edge of the earth further then which you cannot see, that is the Horizon, or as some call it, the *Finitor*, because *finis* or *terminat visum*, it sets the limits or bounds to your sight, beyond which nothing can be seene upon the earth. This is greater or lesser, according as the height of the eye above the plaine superficies of the earth, is more or lesse. The most exact triall hereof is at Sea, where there are no mountaines nor any unequall rifings of the water to hinder the sight, as there are at land. For example let $(CB AF)$ be the superficies of the Sea, and let a mans eye be placed in (X) above the Sea; as the eye stands higher or lower so will the distance seene be more or lesse, as if the height of (XA) bee 6 foot which is ordinary the height of a man, the eye looking from (X) to (B) shall see 2 miles and 3 quarters, if (X) be 20 foot high (BA) will be five miles, if 40 foot 7 miles, if 50 foot 8 miles. So that from the mast of a ship 50 foot high, a man may see round about at sea 8 miles every way, toward (BG) and $(F.)$ So farre may the water it selfe bee seene, but any high thing on the water may bee seene farther, 16, or 20 miles according as the height is, as the ship at (C) may be seen from (X) as farre more as it is from (A) to (B) . There can be therefore no certaine quantity and space set downe for this sensible Horizon, which continually varies according to the height of the eye above the plain ground or sea. This Horizon is not at all painted on the globe nor can be.



See *wright*
of Navigation
p.229.

The intelligible or true Horizon is a line which girt the earth round in the midst, and divides it into two equal parts or Hemispheres, the uppermost, upon the top and middle point whereof we dwell, and that which is under us. Opposite to this in the Heavens is another Horizon, which likewise cuts the Heaven into two Hemispheres, the upper and the lower. Above which circle when any starre or the Sunne is moved, it then riseth unto us, and setteth unto those that dwell opposite unto us, and so on the contrary. You may conceive it best thus, if standing upon a hill, or some open place, where you may perfectly see the setting of the Sunne, you marke when the Sunne is halfe gone out of your sight, you may perceive the body of the Sunne cut in two, as it were by a line, going along through it, the halfe above it yet seene, that underneath is gone out of your sight. This line is but a peece of the Horizon, which if you conceive to be drawn upward about the World from the West to the North, and so by East and South, to West againe, you have the whole Horizon described.

This circle is not drawn upon the body of the globe, because it is variable; but stands on the outside of it, being a broad circle of wood covered with paper on which are set the months and dayes of the yeare, both in the old and new Calender, and also the 12. signes, and the points of the Compasse. All which are easily discerned by the beholding. The use of this Horizon is not so much in Geographie as in Astronomy.

The Zodiacke is a circle which compasseth the earth like a belt, crossing the Equator slopewise, not streight as the Meridians doe. Opposite to it in the Heavens is another circle of the same name, wherein are the 12. signes, and in which the Sunne keeps his owne proper course all the yeare long, never declining from it on the one side or other. The use hereof in Geographie is but little, onely to shew what people they are over whose heads the Sunne comes to bee once or twice a yeare; who are all those that dwell within 23. degrees of the Equator; for so much is the declination, or sloping of the Zodiacke. This circle is also called the Eclipticke line, because when the Sunne and Moone stand both in this circle opposite each to other, then there happens an Eclipse of the Sunne or Moone, upon a globe it is easily discerned, by the sloping of it from the Equator, and the divisions of it into 12. parts, and every of those 12. into 30. degrees.

These are the greater circles: the lesser follow; which are all of one nature, and are called by one generall name: sc. Parallels, because they are so drawn on each side of the Equator, as they are equidistant unto it every way. Many of this kinde are drawn upon the globe (as is easie to be seene) and may be conceived to be drawn upon the earth: but there are onely two sorts chiefly to bee marked: namely the

{ Tropickes and the }
{ Polar circles. }

The Tropickes are two parallel circles distant on each side of the Equator 23. degrees shewing the farthest bounds of the Sunnes declination North or South from the Equator, or the middest of heaven. And therefore they are called tropicks a *τροπος* vertendo, because when the Sunne comes over the *e* lines, he either turns away from us, as in the Summer, or turnes toward us againe as in the Winter: There are then two of them vid.

- 1 The Tropicke of Cancer which lies on the North side of the Equator, to which when the Sunne comes, it makes the longest day in Summer.
- 2 The Tropicke of Capricorne, lying Southward of the Equator, to which when the Sunne comes, it makes the shortest day in Winter.

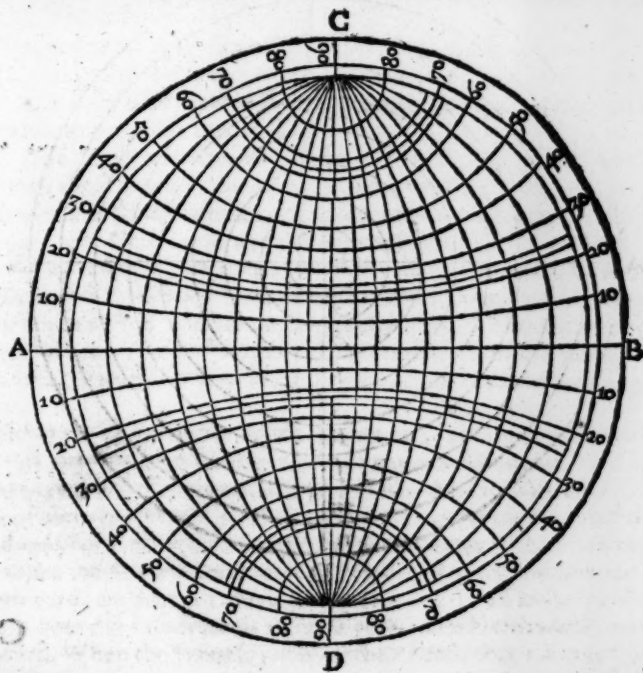
The Polar circles are two parallels drawn by the poles of the Zodiacke compassing about the Poles of the world, being distant from them every way 23. degrees. These are two.

- 1 The Arctike circle that compasseth about the North Pole: it is so called because that in the Heavens (whereunto this in the earth lies opposite) runs through the

the constellation of the great Beare, which in Greeke is called *αρκτος*.

2. The *Antarctick* circle that compasseth about the South Pole, and is placed opposite unto the former. All these with the former are easily knowne vpon the Globe by these descriptions, and names usually added unto them. But because Maps are of an easier price, and more common use then Globes, it will be needfull to shew how all these circles, which are drawne most naturally upon a round Globe, may also as truly, and profitably for knowledge and use bee described upon a plaine paper. Whereby wee shall understand the reason of those lines which wee see in the usuall Maps of the world, both how they are drawn, and wherefore they serve. Vnderstand therefore, that in laying downe the globe upon a plaine paper, you must imagine the Globe to bee cut in two halves thorow the midst, and so to bee pressed downe flat to the paper; as if you should take a hollow dish, and with your hand squeeze the bottome downe till it lie flat upon a board, or any other plaine thing: for then will those circles that before were of equall distance, runne closer together towards the midst. After this conceit, vniversal Maps are made of two fashions, according as the globe may be divided two wayes, either cutting quite through by the Meridian from North to South, as if you should cut an apple by the eye and the stalke, or cutting it through the *Aequinoctiall*, East and West, as one would divide an apple through the midst, betweene the eye and the stalke. The former makes two faces, or hemispheres, the East and the West hemisphere. The latter makes likewise two hemispheres, the North and the South. Both suppositions are good, and befitting the nature of the globe: for as touching such vniversal Maps, wherein the world is represented not in two round faces, but all in one square plot, the ground whereupon such descriptions are founded, is lesse naturall and agreeable to the globe, for it supposeth the earth to be like a Cylinder, (or role of bowling-alles;) which imagination, unlesse it be well qualified, is utterly false, and makes all such Maps faulty in the situation of places. Wherefore omitting this, wee will shew the description of the two former onely, both which are easie to be done.

I To describe an *Aequinoctiall* planisphere, draw a circle (*ACBD*) and in-

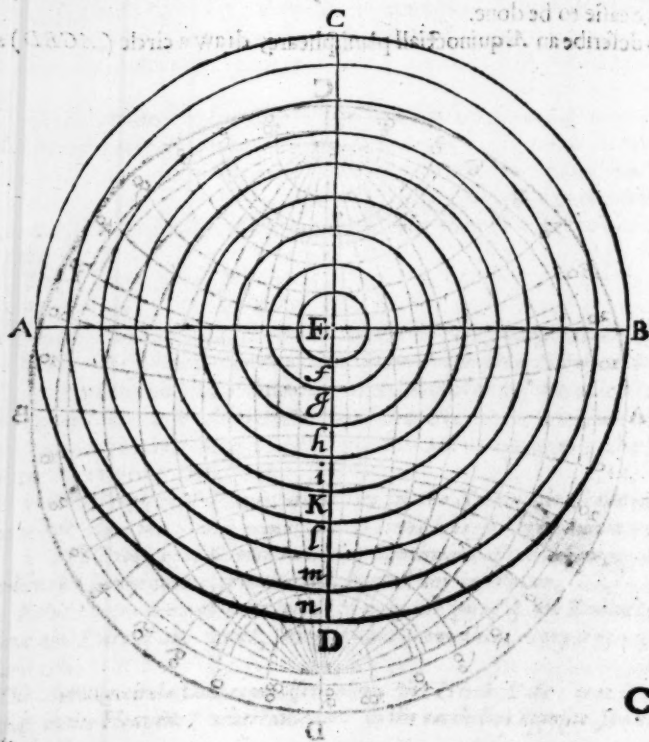


Of this Hypothesis see
the errors
of Navigation

scribe

scribe in it two diameters (AB) and (CD) cutting each other at right angles, and the whole circle into foure quadrants: each whereof divide into 90. parts, or degrees. The line (AB) doth fitly represent halfe of the *Equator*, as the line (CD) (in which the points (C) and (D) are of the two poles) halfe of the *Meridian*: for these circles, the eye being in a perpendicular line from the point of concurrence, (as in this projection it is supposed) must needs appeare streight. To draw the other, which will appeare crooked, doe thus. Lay a rule from the Pole (C) to every tenth or fifth degree of the halfe circle (ADB) noting in the *Equator* (AB) every intersection of it and the rule. The like doe from the point (B) to the semicircle (CAD) noting also the intersections in the *Meridian* (CD). Then the diameters (CB) & (AB) being drawen out at both ends as farre as may suffice, finding in the line (DC) the center of the tenth division from (A) to (C) and from (B) to (C), and of the fift point of intersection noted in the meridian from the *Equator* towards (C) by a way familiar to Geometricians: connect the three points, and you haue the parallel of 10. degrees from the *Equator*: the like must bee done in drawing the other parallels on either side the *Equator*; as also in drawing the *Meridians* from centers found in the line (AB) in like maner continued. All which is illustrated by the following diagram.

2 To describe a Polar Planisphere, draw a circle ($ACBD$) on the center (E) and as before; inscribe in it two diameters (AB) and (BC) cutting each other at right angles, and the circle into foure quadrants. Each quadrant being divided into 90. parts, draw from every 5th or 10th of those parts a diameter to the opposite point: these lines all concurring in the center (E) being the Pole, are as so many *Meridians*. Next, having cut the halfe of any one of the former diameters into 9 parts, as (ED) in the points (F, G, H, I, K, L, M, N) draw on the center (E) so many circles, and these represent the parallels of the Globe, being also here true parallels.



C H A P. V.

Of divers Distinctions, and Divisions of the Earth.

NExt after the Circles of the Earth, wee may not unfitly handle the severall divisions and distinctions which Geographers make of the parts, and inhabitants of the earth. These are many, but we will briefly runne them over.

1 The first and most plaine is by the coasts of the Heavens, and rising, and setting of the Sunne, so it is distinguished into the

East: where the Sunne riseth. *Oriens, Ortus orientis.*

West: where the Sunne goeth downe. *Occidens.*

North: betweene both fromwards the Sunne at Noone. *Septentrio.*

South: betweene both towards the Sunne at Noone. *Meridies.*

These foure are called the chiefe or Cardinall quarters of the world. They with the others betweene them are easily knowne, but are of more use to Mariners then to us. We may rather take notice of those other names which by Astronomers, Geographers, Divines, and Poets are given unto them. Who sometime call the East the right hand part of the world, sometime the West, sometime the North, and sometime South, the diversity is noted in these verses,

Ad Boream terre, Sed Coeli mensur ad Austrum.

Preco Dei exortum, vides, occasumq, Poeta.

That is, Geographers looke to the North, Astronomers to the South.

Priests turne them to the East, and Poets to the West.

This serves for understanding of Authors, wherein any mention is made of the right or left part of the world. If for example he be a Poet, he meanes the South by the right hand, the North by the left: because a Poet turnes his face to the West, and so reckons the quarters of heaven and earth.

2 The second distinction is by the notable differences of heat and cold, that are observed on the earth, this is the division of the earth by Zones or Girdles, which are parts of the earth, wherein heat and cold doe remarkably increase or decrease. Those Zones are 5.

1 The hot or burning Zone (*Zona torrida*) which containes all that space of earth, that lieth betweene the two Tropicks, supposed heretofore (but falsly as after experience hath shewed) to be inhabitable by reason of heat, the Sun continually lying over some part of it.

2. 3 The temperate Zones wherein neither heat nor cold is extreame but moderate: these are two, one on the North side of the Æquator, betweene the Articke circle, and the Tropicke of Cancer, another on the South side betweene the Tropicke of Capricorne, and the Antarticke circle.

4. 5 The cold or frozen Zones, wherein cold for the most part is greater then the heat, these likewise are two, one in the North, betweene the Articke circle, and the North Pole, another on the South betweene the Antarticke circle and the South Pole. These of all parts of the earth are worst inhabited, according as extremity of cold is alwayes a greater enemy to mans body, then extremity of heat.

3 The third distinction is by the shadowes, which bodies doe cast upon the earth, just at nooneday; for these doe not alwayes fall one way but diversly according to their diverse scituation upon the earth. Now in respect of the shadowes of mens bodies, the inhabitants of the earth are divided into the

1 *Amphiscij* (*amphiscij*) whose shadowes at noone day fall both waies, *sc.* to the North when the Sunne is Southward of them, and to the South when the Sunne is Northward, and such are those people that doe dwell in the hot Zone. For the Sunne goes over their heads twice a yeare, once Northward, another time Southward. When the Sunne is just over their heads they are called *Astij, Solis*, without shadow.

2 *Heteroscij*

2 *Heterosci* (*ἡτεροσκοι*) whose shadowes doe alwaies fall one way, namely alwaies towards the North, as those that dwell in the Northerne temperat Zone, or alwaies to the South, as those that dwell in the Southerne temperat Zone.

3 *Periscii* (*περισκοι*) whose shadowes goe round about them, as those people who dwell in the two cold Zones, for as the Sunne never goes downe to them after he is once up, but alwaies round about, so doe their shadowes.

4 The fourth distinction is by the situation of the Inhabitants of the earth, compared one with another, who are called either,

1 *Periaci* (*περιακοι*) such as dwell round about the earth in one and the same parallel, as for example under the Tropicke of Cancer.

2 *Antaci* (*ἀντακοι*) such as dwell opposite to the former in another parallel of the same distance from the Equator. As those under the Tropicke of Capricorne.

3 *Antipodes* (*ἀντιποδες*) who dwell just under us their feet opposite to ours.

5 The fifth distinction is of the length and breadth of the Earth, and places upon it: these may be considered two wayes,

1 Absolutely, and so the

Longitude or length of the Earth is its circuit, and Extension from East to West.

Latitude or breadth of it, is the whole circuit and compasse of it from North to South.

2 Comparatively, comparing one places situation with another, and so the

Longitude of a place, is the distance of it from the first Meridian going through the Canary Ilands, Eastward. Whereby wee know how farre one place lies East or West from another.

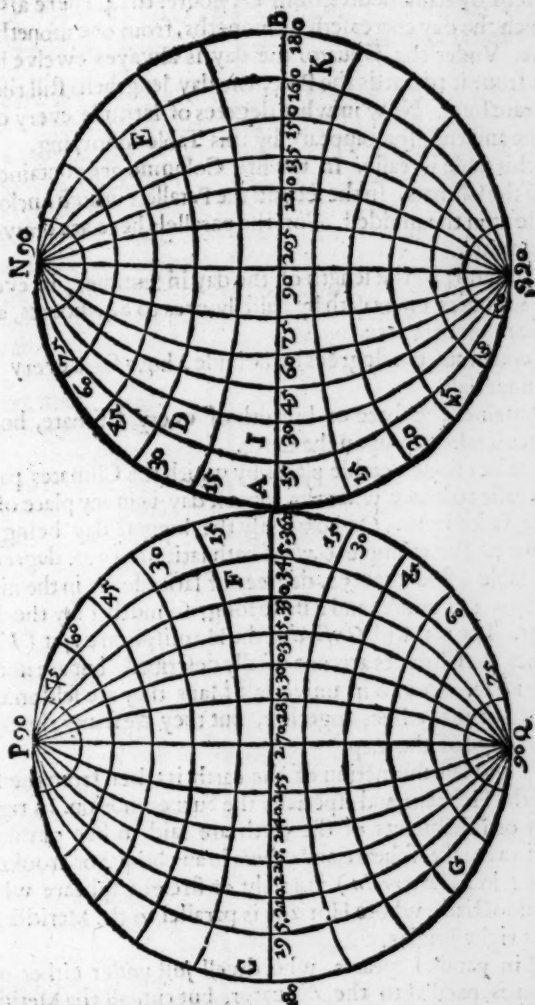
Latitude of a place, is the distance of it from the Equator towards the North or South. Whereby wee know how farre one place lies Northward, or Southward of another.

The longitude must be reckoned by the degrees of the Equator, the latitude by the degrees of the Meridian.

For example, in these two Hemispheres, the longitude of the whole Earth is from (C) to (A) and (B) in the Equator. The latitude is from (N) to (S), and from (Q) to (P) the North and South Poles, and this reckoned in any meridian. The first meridian is (ANES) which goes by the Canary Ilands, the Equinoctiall is (ABCA). Now I have a City given *fc.* (D) I would know in what longitude and latitude it is. For the longitude I consider what meridian passeth through it, which is the meridian (NDS) which crosseth the Equinoctiall in (I) at 15 degrees, wherefore I say that (D) stands Eastward from the first meridian 15 degrees. So I finde that the City (E) is 150 degrees Eastward, (G) 195, and (F) 345.

For the latitude I consider what parallel runnes through (DEG) or (F) and I finde the 30 to passe by (D) 45 by (E) the 15 by (F) the 45 Southward by (G) and those numbers are the latitude of the place, that are distant from the Equator, (CAB).

Concerning the meanes whereby the longitude of places is found out, there is scarce any thing that hath troubled Mathematicians so much as the observation of it. For because no standing marke can bee taken (the Heavens alwaies running about) it must needs bee difficult. To measure upon the earth, going alwaies under the same parallel, is a way certaine in regard of some few places, but so troublesome in it selfe, and unprofitable in regard of other places that lie out of that parallel, that it may be accounted a fruitlesse labour. The voyages and accounts of Mariners at Sea, are so full of casualty and uncertainty by reason of the doubtfull variation of the Compasse, the unequall violence of winds and tides, the false making of their sea Cards, by which they faile, and the ignorance of the Masters for the greatest part, as there can hardly bee any assured reckoning



reckoning made by them. The best meanes of observation is by Eclipses of the Sunne and Moone, which in severall Countreys are sooner or later seene, according as one place lies farther East, or farther West from another. But this also falls out so seldome, and when it happens, is so seldome observed, and when it is observed, hath so many difficulties in the precise and exact observation of it; that wee may well account this inquiry after the longitude of places, to bee one of those things whereof we must bee content to be ignorant, and rather to gesse at in Grosse, then in vaine to strive for exactnesse, which is the cause why the tables of the longitude and latitude of Cities, though they many times agree in the latitude, doe yet for the most part very much differ in the longitude.

6 The sixth distinction is by the length or shortnesse of the day in Summer time in severall quarters of the earth. And this division is by *Climats* (*κλίματα*) which are severall spaces of the earth contained betweene two parallels, in the which the longest day in Summer exceeds that in another parallel by halfe an houre. There is a great deale of confusion and difference betweene the late and ancient Geographers about the distinction and divers reckonings of the *Climats*. It is not worth the labour to recount their opinions and Calculations: thus much is plaine; and easie to be knownt: There are 24. *Climats* in which

Those that dwell under the Pole have not past 3. or 4. moneths *præfunda tenebras* darke night, for when the Sun is in *Libra* and *Pisces* being then night, the Horizon it sends forth to them a glimmering light not unlike to the twilight or dawning of the day in a morning a little before the Sunnerising. *Munster. lib. 1. cap. 5.*

the day encreaseth by halfe houres, from 12. houres to 24. There are likewise 6. Climats in which the day encreaseth by moneths, from one moneth to fixe, that is halfe a yeare. Vnder the *Æquator* the day is alwayes twelve houres long, but as you goe from it towards the Pole, the day lengthens still till it comes to a day halfe a yeare long. Now in what degrees of latitude every one of these Climats beginne and end, shall appeare by this Table following.

The use of this table is easie. In the first Columne are contained the names and number of the Climats. In the second the Parallels which enclose it on each side, and divide it in the middest. For the parallels here are drawn by every halfe houres encrease.

The third Columne is the length of the day in Summer, in every Climate, which from 12. houres encreaseth by halfe houres to 24. houres, after by moneths, from one moneth to fixe.

The fourth contains the degrees of latitude, how farre every Climate lies from the *Æquinoctiall*.

The fifth contains the space or breadth of every Climate, how many degrees or minutes it takes up upon the Earth.

The sixt contains some notable places by which the Climates passe.

Hereby it is easie to know what the longest day is in any place of the World whose latitude is knowne. Or contrarily the longest day being knowne to know the latitude. For example *Oxford* hath latitude 52.0. degrees, longitude 24.0. In the table I find that 52. degrees of latitude lie in the ninth Climate wherein the day is 16. houres and a halfe long, so much I say the day is at *Oxford* in Summer. The place of *Oxford* in the Hemisphere is at (V.)

Vpon Globes the Climates are not usually described, but are noted out upon the brazen Meridian. So also in universall Maps they are seldome drawne, to avoid confusion of many lines together, but they are many times marked out on the limbe or edge of the map.

The seventh and last distinction of the earth is taken from the situation of it in respect of the Heavens, and especially the Sunnes motion. In regard whereof some parts or inhabitants of the earth are said to bee or dwell in a right Spheare, some in a Parallel spheare, and others in an oblique or crooked spheare.

They dwell (in *Sphæra recta*) in a right or streight spheare who dwell just under the *Æquinoctiall*, whose Horizon is parallel to the Meridians, but cuts the *Æquator* at right Angles.

They dwell in parallel spheares, who dwell just under either of the Poles, whose Horizon is parallel to the *Æquator*, but cuts all the Meridians at right Angles: and the latter is sometime called a parallel spheare.

They dwell (in *Sphæra obliqua*) in a crooked spheare, who inhabite any place betweene the *Æquinoctiall* and the Pole, whose Horizon cuts the *Æquator*, the parallels, and the Meridians at oblique or unequal Angles.

CHAP. VI.

Of the measuring of the Earth.

WE are now come to the last point concerning the measuring of the Earth, which is twofold,

either of the ¹ Whole Earth.

² Several parts thereof, and their distance one from another.

Concerning the first it is but a needlesse labour to recount the diversity of opinions that have been held from time to time by learned Geographers, What is the compasse and depth of the Earth. This may be seene in *Hues de usq. Globi; part. 3. cap. 2.* and in *Clavius on Sacrobosco* with others. They all differ so much one from another, that there is no certainty in trusting any of them. The most common and received opinion is, that the circuit of the earth is 21600. miles, reckoning

reckoning 60. miles for every degree, and then the depth or Diameter of the earth shall be 6877 English miles, containing 5000. foot in a mile.

The meanes whereby the circuit and Diameter of the earth are found out are principally two.

1 By measuring North or South, under one Meridian some good quantity of ground, three score or an hundred miles (or two for the more certainty) for in those petty observations of small distances there can bee no certaine working. This may be done, though it be laborious, yet exactly without any sensible error by a skilfull workeman, plotting it out upon his paper, with due heed taken, that hee often rectifie the variation of the needle (by which he travells) upon due observation, and that all notable ascents and descents, with such winding and turning as the necessity of the way causeth, bee reduced to one streight line. By this meanes we shall know how many miles in the Earth answering to a degree in the Heavens, if exact observation by large instruments bee made to find the elevation of the Pole, in the first place where wee begin to measure, and the last where we make an end.

Besides this way of measuring the circumference of the Earth, there is none other that hath any certainty of observation in it. That by Eclipses is most uncertaine, for a little error in a few minuits of time (which the observers shall not possibly avoid) breeds a sensible and foule error in the distance of the two places of observation. That of *Erasthenes* by the Sunne beames, and a shadow of a stile or gnomon set upon the Earth, is as bad as the other. For both the uncertainty of the calculation in so small quantity as the shadow and the gnomon must needs have, and the difficulty to observe the true length of the shadow, as also the false supposition whereupon it proceeds, taking those lines for Parallels which are not, doe manifestly shew the reckoning hereby made to be doubtfull and not sure.

2 The second is by measuring the semidiameter of the Earth: For as the circumference makes knownen the diameter, so doth this the circumference. This may bee done by observation made upon some grear hill, hard by the Sea side. The invention is of *Marinylus* Abbot of *Messana* in *Sicilia*, but it hath beene persifted, and more exactly performed by a worthy Mathematician *Ed.W.* who himselfe made proofe of it. By this art was the semidiameter of the Earth found out to be 18312621 foot: which allowing 5000 foot to a mile is 3662 and a halfe miles, which doubled is the whole diameter 7325 miles. The circuit of the Earth shall be 23030 miles, and one degree contains 63 $\frac{1}{2}$ miles, which is almost 64 miles. Which as it exceeds the ordinary account, so may wee rest upon it as more exact then any other.

2 The second point concerning the measuring of particular distances of places one from another is thus performed.

First upon the Globe it is most easie. With a paire of Compasses take the distance betweene any two places howsoever scituated upon the Globe, and apply the distance so taken to the *Equator*, and see how many degrees it takes up; those degrees turned into miles shew the distance of the two cities one from another.

Upon universall Maps there is a little more difficulty in finding the distance of places, which here must be considered in a threefold difference of scituation:

- 1 Of Latitude onely.
- 2 Of Longitude onely.
- 3 Of Latitude and Longitude together.

1 If the two places differ onely in Latitude, and lie under the same Meridian, if the places lie both on one side of the *Equator*, the differences of the latitudes, or the summe of both latitudes added together, if one place lie North and another South, being turned into miles gives the true distance.

2 If the places differ onely in Longitude, and lie both under one parallel of latitude, the difference of longitude turned into miles proportionably according to

the latitude of the parallel, gives the true distance.

3 The distance of places differing both in latitude and longitude may thus be found out, first let there bee drawen a semicircle upon a right diameter noted with (*ABD*) whereof (*D*) shall bee the Center. The greater this semicircle is made, so much the more easie will be the operation; because the degrees will be larger. Then this semicircle being drawen, and accordingly divided, imagine that by the helpe of it, you desire to finde out the distance betwixt *London* and *Ierusalem*, which Cities are knowne to differ both in longitude and latitude. Now, that the true distance betwixt these two places may bee found out, you must first subtract, the lesser longitude out of the greater, so shall you finde the differences of their longitudes, which is 47. degrees. Then reckon that difference upon the semicircle, beginning at (*A*) and so proceed to (*B*;) and at the end of that difference, make a marke with the letter (*E*) unto which point by your ruler, let a right line bee drawne from (*D*) the center of the semicircle. This being in this sort performed, let the lesser latitude be sought out which is 32 degrees, in the foresaid semicircle, beginning your account from the point (*E*) and so proceed towards (*B*), and at the end of the lesser latitude let another point bee marked out with the letter (*G*;) from which point, let there bee drawen a perpendicular line which may fall with right angles upon the former line drawn from (*D*) to (*E*), and where it chanceth to fall, there make out a point with the letter (*H*;) This being performed let the greater latitude which is 51 degrees 32 minuits, bee sought out in the semicircle beginning to reckon from (*A*) towards (*B*) and at the end of that latitude set another point signed out by the letter (*I*) from whence let there bee drawen another perpendicular line that may fall with right angles upon the diameter (*AC*;) and here marke out a point with the letter (*K*;) this done take with your compasse the distance betwixt (*K*) and (*H*) which distance you must set downe upon the diameter (*AC*) placing the one foot of your compasse upon (*K*) and the other towards the center (*D*;) and there marke out a point with the letter (*L*;) then with your compasse take the shorter perpendicular line (*GH*;) and apply that wideneffe upon the longer perpendicular line (*IK*;) placing the one foot of your compasse at (*I*;) which is the bounds of the greater latitude, and extend the other towards (*K*;) and there make a point at (*M*;) then with your compasse take the distance betwixt (*L*) and (*M*;) and apply the same to the semicircle, placing the one foot of your compasse in (*A*) and the other towards (*B*;) and there marke out a point with the letter (*N*;) now the number of degrees comprehended betwixt (*A*) and (*N*) will expresse the true distance

of the two places, which will bee found to bee 39. degrees :

which being multiplied by 60. and so converted into

miles according to the former rules, will

produce 2340. which is the di-

stance of the said

places.

FINIS.

3

A
SUMME OF
MORAL
PHILOSOPHY:

SUCCINCTLY GATHERED,
ELEGANTLY COMPOSED,
AND METHODICALLY
bandled,

BY
THAT LEARNED SCHOLLER
AND VORTHY DIVINE
WILLIAM PEMBLE,
Master of Arts, and late Com-
moner of *Mag. Hall.*

Mores honesta verbis, verba Moribus.

Τρόπος ἔγω σοὶ τὰ λόγῳ πιστότερος, ἵνα μὴ μόνον λέγων ἀλλὰ καὶ σιωπῶν το
αἰδύοιμον ἔχῃς.



L O N D O N,
Printed by *M. Fleisher*, for *Edward Forrest*, and are sold by *R. Royston*
in Ivy lane at the signe of the Angell.

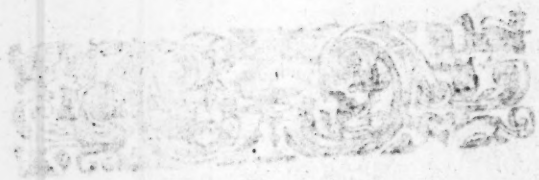
A SUMME OF MORAL PHILOSOPHY

SUGGESTEDLY GATHERED
ELEGANTLY COMPOSED
AND METHODICALLY
BUILT

BY
THAT LEARNED SCHOLAR
AND VORTHY DIVINE
WILLIAM GEMBLE
Master of Arts and Law Con-
vener of King's Hall

More largely useful, useful, and useful.

Printed by M. Fisher, for Edward Fennell and are sold by R. Roper
in Ivy Lane at the signe of the Angell



LONDON
Printed by M. Fisher, for Edward Fennell and are sold by R. Roper
in Ivy Lane at the signe of the Angell



To the Reader.

BEhold (unpartiall and courteous) Reader, I present unto thee one whom I need not name, the whole booke so fully speakes him, it being the Character of him, whose name the Frontispice beares: here hee yet liues although dead, for the Booke breathes that which hee once was, and when he was, hee liued that which the book teacheth, for such was his admirable composure, that his very actions were a moral Lecture, having exactly learned that of Minutius, non loqui Magna sed vivere. I will not make any elogie of the Author, nor encomion on the Book, when as the one deserves rather the registering in Annales, then the light torch of a running Pen; for the other unlesse my guesse faile me, to a judicious braine, and a well seasoned heart, it will commend it selfe, it having a mixture of learning and delight, whereby it will both instruct and please the Reader, and to say truth such was his dexterity, that by Rhetoricke he could insinuate to a perswasion, and by solidity of argument evince thee to assent. But if perhaps the book in all points answere not the worth of the Man, or thy expectation, let it not detract from his deserts, or beget a prejudice in thy conceit, since the work is Posthumus, and (I am perswaded) never by the Authour intended for the publique censure; neither is the Printer much to be blamed, since hee is so carefull to preserve any of thy blest reliques (Pemble) yet unslaine, from the unhappy fate of the Urne. Lastly, since to offend is humanæ sortis, whatsoever errors thou mayest find either in Author or Printer, the one thou mayest in thy judgement correct, the other in humanity condone. So mayest thou in some sort vindicate the Authour, and gratifie the Printer. Farewell.

| | | | | |
|---------------------|---------------|------------------|--|----------------|
| All disciplines are | 1 Theorickall | 1 Meta-physical. | 1 Inspired as Divinity contained in the Bible. | |
| | | | 2 Acquired of which <i>Aristotle.</i> write <i>Avicenna.</i> | |
| | 2 Practicall | 1 Reall | 2 Mathematicall | 1 Arithmetick. |
| | | | | 2 Geometry. |
| | | | | 3 Musick. |
| | | | | 4 Astronomy. |
| | 2 Practicall | 2 Rational | 3 Physicall concerning Generation | 1 Grammar. |
| | | | | 2 Rhetoricke. |
| | | | | 3 Logick. |
| | | | | 1 Oeconomicks. |
| | 2 Practicall | 1 Active | 2 Factive as skill in | 2 Ethicks. |
| | | | | 3 Politicks. |
| | | | | 1 Navigation. |
| | | | | 2 Hunting. |
| | | | | 3 Husbandry. |

A SUMME OF MORAL PHILOSOPHY.

I. Ethickes.

Morality is the Art of behaviour, prescribing directions for manners arising out of use and customary conversation.

Manners are either { 1 Reall making a good man *εὖ*
2 Complementall, making a faire conditioned man *εὐ*

The Vertues arising out of both *κατασκευαστικα* 1 Time.
Goodnesse is Positive. Complement varies { 2 Place.
according to 3 Person.

The one necessary, the other indifferent, if used there is a grace and ornament, if not the impeach is not great.

Goodnesse is wrought by actions of Vertue.

Naturall for men to work: our life tearmed by the *Pythagorians* *οὐρα ἀνθρώπων*,
a fardle of Actions: Beasts are dull and at command, *ἀνθρώποι* *οὐκ ἀντι*
men onely are Active, as

having { Wit for Judging.
Will for prosecuting.

Actions are to be perfected by { Vertue for directions.
Fortune for successe.

Vertue is lame without Fortune, and Fortune blind, heady and headlesse without vertue.

Our working is either { 1 In a state Politicke.
2 In a family Oeconomick.
3 In private touching our selves, only Ethicke.

In Ethicks are foure causes of Actions.

1 The Finall, the utmost is felicity, the speciall and immediate end, and particular good being in shew or substance good.

2 The Formall, as { Vertues } making our { Bonum } *Verum*
Vices } *Apparent*

Actions { Good.
Bad.

3 Materiall, as Passions, whereon our vertues must worke.

4 Efficient, as { Wit that makes prudence.
Will that makes pr-election.

This is your Subject of all Ethicks.

I I. Of particular Ends.

*Omnia appetunt
Bonum.*

NO Action so suddaine, but proposeth some end: As actions are sundry, so are particular ends: Our appetite affects them as either in shew or substance good.

Desire naturally is for preservation; Evill as it is evill is an enemy to being: Hence the aime of all Appetite must be some good.

Appetites are either

- 1 Natural, as common Inclinations to a generall good of being: as for the Earth to beare downewards, the fire upwards,
- 2 Sensitive called *appetitus sensitivus*, whose issues are, to wit
 - 1 Griefe for things to bee avoided.
 - 2 Pleasure for things to bee prosecuted.
- 3 Rationall, partly from the Understanding, that judges the good: partly from the wil that affects it: this is in men only, the other in beasts.

Hence ariseth three

- 1 *Bonum Entis*: The object proper to the naturall.
- 2 *Bonum sensus*: Whose satisfaction is delight.
- 3 *Bonum Moris*: Whose manager is Reason.

If Reason be governesse, we apprehend true good.

If lead by Passion, we follow appearances.

Passion sets a colour on Evill; and perswades the good of it.

Hence are all vicious desires.

Our way for such objects is with *Anniball* to heare the gilded Pillars in *Tanna's* Temple, before we venter to feast on them.

Veri speciem dignoscere cunctis

Ne qua sub arato mendosum vident auro.

Things are desired, either

- 1 Usefull onely to others, not for themselves, so riches in themselves are nothing, but are desired for use only.
- 2 Usefull both for others, and desirable in themselves: so Virtues of themselves are comely, and are as means to happiness.
- 3 Desirable onely for themselves, not for others, as felicity the last good, *telos, finis finium*.

That we often faile of the end intended, is for the want of

either

- 1 Judgement in choice of the right means.
- 2 Ability in not prosecuting that we have chosen.
- 3 Constancy in not persevering in what we have chosen, and began to prosecute.

The excellency of one end above another is knowne.

1 If that end have the most worthy meanes directing to it. Hence the end of Policy is above others as having the meanes of other Practick ends subalternate to it.

2 If it comprehend the speciall end intended by actions of less worth: the art of Horse-man-shippe is referred to art Military.

Hence the end of one is more excellent then the other.

Felicity is the best of ends: our soule affecteth it: Vertues worke it: Constancy in goodnesse perfects it: It selfe is the up-shot of all practick ends.

III. of *Universall Ends.*

Felicity.

Felicity is the proposall of the best good.

We propose our good either as informed by passion or judgement; Passion goes by opinion, and as opinion is staggering, so must such proposals be. Hence to some pleasure, to others wealth, to others honour, is Felicity; all are pleasures for the time, but content not.

This felicity is not true, but forged.

True felicity is from an uprightness of judgment.

That we may find it out, seeke we what in a man can be

1. Greatest perfection.

Of 2. Sole sufficiencie.

3. Quietnesse of minde.

1. Perfection is required to all goods, but the height of perfection to the best goods.

2. Sole sufficiencie { 1. Contentation in what we enjoy. } This keepes us from that there bee { 2. No want of what we enjoy not. } repining.

3. Quiet of minde { 1. Integrity towards God. } Body or { But using them that there bee { 2. True dealing with men. } fortune { alwaies as helps { 3. Not doting on the goods of { not as ends. { 4. Stopping extravagancy of passions.

A breach in any of these marres tranquillity.

In a man we consider a double carriage,

either as { 1. Living in this life only Moral.

2. Preparing himselfe for a future life, Christian.

Hence Stoicks and Platonicks held, we were free of

two Cit- 1. The greater, — Heaven.

ties 2. The lesser, — The World.

This world as it beares the image of the heavenly, and is the way of our journeying thither: So the actions of the one truly moral, are not in opposition to the Christian.

Each of these { 1. Greatest perfection.

lives have in { 2. Sole sufficiencie.

their end { 3. Truest quietnesse of minde.

The felicity of the one is presence of all good, when the soule is seperated.

The meanes to get this generall is Religion.

The felicity of the other is presence of all good, whilst we live.

The meanes to get it, is common honesty, or universall justice.

Living in this world our { Soule onely.

worke is either in { Soule and Body.

The worke of our soule onely is immanent.

The perfection of it is contemplation.

The object and aime of it is Truth.

The satisfaction is content and quietnesse of minde.

The meanes to attaine it, is Sapience and Pondering.

That is an habit generall wrought by

two particulars { 1. Understanding for conceit, and apprehension of principles.

2. Science for inference of conclusions.

This true felicity, { 1. True perfection.

is in it { 2. Sole sufficiencie.

{ 3. Quietnesse of minde.

Our worke both in soule and body is transient, so called because the action of

the

How animal po-
litical.

the soule were secret, were it not that the spreading of the body displayed it: The operations of the soule properly are punctuall and indivisible: As they partake of the body, so they open themselves both to the view, and use of others: Hence arise actions of practise, their speciall aime is the good of others, and such we are not for our selves only, but to be usefull to others, and society arises out of community of nature, our speciall felicity, for use must be practick.

Felicitas Practica.

There are two speciall Felicities then.

As sinne and vice being { Darkenesse of understanding for discerning truth.
in all a double misery { Depravation of will for affecting goodnesse.
So to remedy these, our { Contemplative for the one.
perfection must be { Practick for the other.

These come not of the strength of men, such the blind cannot judge of colors, the perverse cannot will goodnesse.

They are given of God, if any gift comes from above to man, saith *Aristotle*, *Εὐδαιμονία δὲ τῶν ὑπερβαλλόντων δίδωται Θεός.*

It is most fit it should be our felicity, *ἡ δὲ δαίμωνιον, ἢ οὐκ ἀνθρώπων ἐστὶν.*

The freme to manage these must be faith.

Without it { Contemplation is curiosity. { This is the aime of the heathen
{ Good actions but fashion, { goodnesse.
and vaine-glory

With it { Contemplation is wisdom.
{ Action is { 1 Duty to God.
{ 2 Charity to our neighbour { This alone is mans felicity.
{ 3 Salvation to our selves.

I V. *Temporall happinesse described.*

Felicitas est
Actio.

The perfection of things is in their operation: Iclenesse, and want of Action proceeding from Impotency: Hence Felicity being the perfection of man is action.

To will and intend suffices not, but doing is requisite,

In masteries the crownes are not given to the likeliest in person, but to the best in performance. *Arist. Ethic. 1. c. 8.*

Action is a power common to all; communities commend not, such commendation aimes at a speciall, and preferring before others: Thence Felicity the highest of goods must be a speciall action of man, that proceeds from the soule not as it is vegetative, and sensitive (so agreeing with Beasts and Plants) but as it is rationall, only proper to man.

Animi.

Secundum
Virtutem.

In the reasonable soule wee { Governing.
consider two parts, the one { Governed.

The governing part is by { Wit.
{ Will regulating our soules actions, and stopping their
unwarrantable excurrance: This called *Recta Ratio*,
or *Virtus.*

The part to be governed is the seat of Passions.

Though they naturally spring from the freme of reason, and are proper to men onely, yet in themselves they are wild and unruly, but strength of reason must order them.

Our perfection { in the latter which must obey.
is not { but in the former, which must governe.

In via perfecta.

Reasons in strength and actions of Vertue are nothing, unless they are continued: Perfection of good must be without Ruptures: The intercedence of an after evill marres the glory of the precedent good actions: Hence felicity must be

bee a worke of honestie to the end of our dayes.

This felicitie ends with our life, and therefore temporall.

The other begins after death, and is eternall.

V. Things required to temporall Happinesse.

Happinesse is a Vertue common not for our felicity onely, but for the good of others.

An happy mans employment must be beneficence: his reward esteeme and credit among the people.

That hee may bee best in performance, and highest repute, he must have the goods of

Minde.
Body.
Fortune.

Tria bonorum
generare qui-
runtur ad felicitatem.

The minde is most inward, so affordeth goods most proper to felicity; A man for morall goodnesse is to bee judged for the goods within: Things outward as of the Body and Fortune are often changeable. They are not overmuch to bee desired, yet if offered they are to be received; wee take them for conveniencie, not necessity, as usefull to set forth our Vertues both to the good and view of others.

Riches and the goods of Fortune serve for the weale of the body, the body for the soule, the soule for God.

Thus the goods outward are in direction to the goods inward: they make not a man happy, but adorne him; they give his lustre, not his being.

The thing that makes happinesse properly and principally is Vertue, yet Fortune must grace it; as the stones and timber make the house, yet for sight we could wish it pargetted, before we dwell in it: And though a man can foot it well, yet he need not refuse a Coach if offer be made.

Vertue without Fortune is like a King that hath a surer Conncell, though his underlings be rebellious: He is able to keepe him in gard, though abroad there be mutinies; He may be happy in himselfe in despite of Fortune: like as a strong man can beare, if a greater weight should be laid upon him, and can suffer cold, though in the interim his teeth chatter.

An happy man vseth ill fortune, as a good Captaine bad armes, though unframable, yet using them according to art militarie, or as a skilfull craftsman shewing his art on a shoole of bad leather, both may doe well, but better, if their meanes were better.

The goods of the minde are either

- 1 Wit for judging.
- 2 Will for choosing, what we have judged.
- 3 Power for prosecuting what we have chosen.
- 4 Ability for ordering our prosecutions.

Habits are the lowest gifts of the minde.

1 They are gotten by use and custome, the other are naturall.

2 They worke on passions, whose ground is sense.

The other are without sense, sith

- 1 Prosecution
- 2 Choice.
- 3 Iudgement
- 4 Power.
- 5 Wit
- 6 Will.

are inseparate substances.

Habits are onely for the corporall.

Their kinds are

- 1 Intellectuall.
- 2 Morall.

The

The intellectuall, some by doctrine, and instinct, and are 5. to wit, {
 1. Understanding } for contemplation.
 2. Science }
 3. Sapience }
 4. Prudence. } for action,
 5. Arte. }

The morall come by use, and custome, viz. { If ruling passion, it is Vertue.
 If ruled by it, it is Vice. }

Their properties are {
 1. To be begotten by us.
 2. Being gotten long to continue with us.
Qualitas acquisita difficulter mobilis.

The difference betwixt the worke of nature, and of manners is, Nature first begins with the habit, then comes to the action, as first we have the power of laughing, before the act: Manners are first in action, then in habit.

The goods of the body are {
 1. Health.
 2. Strength.
 3. Grace of person.

Though Vertue could appear in deformity, yet it is more honourable in a comely personage: as the Ruby planted in iron hath his luster, yet it sparkles more in a bed of Gold.

The goods of fortune are, {
 1. Wealth.
 2. Worth of birth.
 3. Reputation and credit.
 4. Friends.
 5. Goods of posterity.

1. Goods either in {
 Money.
 Goods as
 Lands.

The use and end {
 1. For necessity principally.
 2. Then for {
 1. Not of pampering.
 2. But of recreation.

It is requisite for purveiance: Poverty and want are repining: necessity of having, armeth to importunity and impudency in procuring: Thence the beggars life, though most to be pitied for want, yet deserves least favour for their boldnesse. The *Pythagoreans* would have an happy man wealthy, but not in abundance: That much prosperity is like over-much light, it quells the eye-sight. That we must wish for no more prosperity, then may fit us for action, as the Pilot takes not the ship of most weight, but of most convenience for coasting: That the evils of much prosperity are greater then they of adversity; as in the body superfluities worke more dangerous diseases, then defects: That as affliction compells our minde, so height of wealth puffes it up, and empties it: Hence we see the rich often injurious and inroaching: A happy man by wisdom prevents these.

2. Worth of birth, this is requisite, that there bee no staine of blood. Low birth defects the minde.

Bastardy is dishonourable, as debarring inheritance to the common rights of a Citizen.

Lewdnesse of parents is a disparagement to the child, as *Diogenes* seeing a boy wantonly given, gave this the reason of it, that surely his father was drunken, when hee begot him: Contrarily it was *Diophantes* brag, that hee could prevaile in any demand with the *Athenians*, sith his father *Themistocles*, could doe so before him.

3 Reputation is either viz. in {
 Height of place, as preferments.
 Good opinion of our fellow Citizens.

1 Preferments are properly due to the best: Lewd governours come in rather by intention then right: *Optimates* is an attribute to those, that for the common good so carry themselves, that *Sua confilia optimo cuique debentur*: They are defined

defined by Tully, *Optimatus fuit, qui nec nocens, nec invidiosus, nec furiosus, nec malis domesticis impediti*: Hence hee ranges even rusticks and tradesmen, so they be honest.

Cicero pro Sextio.

The reason may be, the ground of evill society must be religion, and justice; without it can neither bee restraint from injuries, nor punishment of evill doers, nor reward for the well deserving. Wealth and Power make a Society spareke, and passable, but justice informs, and directs it. This is the fault to quicken it, that as the Organe to want and furnish it. Hence the right of governance principally is due to the best in life.

Good opinion in the minds of others is proper to the Meritorious.

It opens it selfe in { Words } of service.
{ Works }

Three things breed in a man credit { Wisdom }
{ Honesty }
{ Love and kindness }

Arist. 2. Rhet.

The speciall of these is Honesty: for a man truly honest hath that wisdom, that hee can distinguish the good from the bad, to follow the one and avoid the other: and his love is such, that he will labour to benefit all, and injury none: This repute for good actions common and ordinary opens it selfe into praise for actions extraordinary; into honour, glory and admiring: honour and admiration ascends upward, and is the title due to the extreme point of goodnesse: Wee yeeld it to things of most distance, and farthest out of our compass: Hence all things most admired are most perfect: for the persons most admired are of the lowest condition; therefore Pythagoras boasted hee had got this good by Philosophie, that hee had learned to wonder at nothing, sith admiration proceeds rather out of the gaze of ignorance, then from a true view of judgement.

As in Nature there is excess and defect, as in monsters, so in manners also. Things honoured and admired are out of the reach of Envy.

Hence good cannot be envied, since Envy is not at lower perfections: Praise is a title due to vertue, and is the reward of it; we attribute it not simply, but in comparison; nor is a man so much praised for his absolute good, as because in that good hee exceeds others, that are in comparison worse then himselfe: Hence praise stands in a proportionate preferring before others.

Glory is simply without reference to defects of others: It admits no proportion by reason of distance: praise may bee given and taken of equals: Glory is for a Superiour onely: praise recants downwards to conferre with defects, and after conference to extoll the better defects of the other: Glory admits not of comparing, but is a title absolute.

Hence *Felicitas bonum* { Honorable.
{ Non laudabile.

4 Goods of posterity as of { Children } somewhat to be respected of an hap-
{ Kindred } py man.

It followes him after death as a complement of his glory, yet so that it nothing detracts from him, if the contrary happen.

5 Friends are requisite to happinesse partly for { Use.
{ Comfort.

1 For use, sith a man cannot rely upon the purchase of his owne hands onely, but hee often requires an helpe: Management of things are sundry, and sith they must each have their severall dispatch, they cannot so well bee compassed by one.

2 For comfort, sith a man is pliable to utter himselfe to some one of trust: Troubles are incident to all; and there is ease in revealing them. *Sit angulat inclusus dolor.* Againe our nature abandoneth solitarinesse: Presence of friends

friends keeps us from feeding on our owne hearts, like *Belliphon* in the wil-
dernesse.

Ipsa suum cor edens hominum vestigia vitat.

To friendship three things are required, { *Virtus, ut pulchrum.*
1. *Consuetudo, ut iucundum.*
2. *Utile, ut necessarium.*

Virtue the ground, that must begin it.
Pleasure, and conversation, that continue it.

Use and helpe, that must shew, utter and exercise it.

As it is the prop and ray of mans life, and follows immediately from the
sociableness of his nature, so it relies on three goods,

The end of all appetites { *Bonum honestum.*
1. *Bonum utile.*
2. *Bonum iucundum.*

Friends must not be { suddenly gotten.
1. many in multitude.

Sudden friends have but small root of love.

It was *Zenox* answer when hee was reprehended for slow painting; that
hee must bestow time in drawing those lines, which he hoped should continue
for ever. Observance of their passions and qualities must precede, before we
enter to close with them.

Whether they be agreeable in manners to us.

Whether they inroach not too fast into our acquaintance, for towardnesse
of this is an occasion of suspect: for such a one is either a common friend and
so lesse intire, or hee comes to you but for advantage and so for advantage will
betray you.

Multitude of friends empties affection, as the channell must have many shal-
lows, that is cut into sundry streames. One bragged to *Chilo*, that hee knew
not many his enemies: hee replied that by that he knew, not many was his
friends. Friendship is a tenure precise, and proper to one; not to be enlarged
to multitudes: *Agesilaus* would use all in courtesie, but hee was familiar and
friendly but to few.

The Giant that had 50. bellies, was faine to have an 100. hands, and had by
this no more benefit of sustenance, then they that to one belly have but two
hands, *Amicitia tantum inter duos.*

Men of worth have many fellows, few friends.

Friendship is when they follow principally for Vertue.

When they follow for goods outward { Countenance.
1. Power.

Countenance: It is greatness of retinue usefull to men of place. *In paucis
decus, in bello presidium.*

Power: It is faction, and by it they raise themselves, depreesse their adver-
saries. In government it is good to use men of one ranke equally: for to
countenance some extraordinarily is to make them insolent, and the rest dis-
content. In favour it is best to use men with much difference, and election
for it makes the persons preferred more carefull, and the rest more officious.

V. I. Things required to temporall Happiness.

Happiness being the perfection of man must bee in things that most ho-
nour him, nothing so worthy of him as vertue. It proceeds immediatly
from his soule, as partaking both of wit and will.
Hence as beasts are devoid of both { Vertuous
these, so they cannot be filled { Happy.

To live according to vertue, and the prescript of nature is accounted all one. The reasons are three.

- 1 Nature is the finger of God in creatures, whose worke is for the best, and vertue is naught but the perfection of God.
- 2 Man by nature an image of God, as vertue and goodnesse flowes immediately from the one, so ought from the other.
- 3 Our soule hath will and wit: Wit the apprehender of Truth, and Will of Good; the conioyning of both is mans nature, which of it selfe must both judge and affect true good: this onely is vertue. Vertue is termed by them any speciall action proper to any speciall nature: Heavens, Elements, and dead bodies are by nature active, and vertuous: As things are most materiall, so are they lesse quick: Hence soules are most vertuous, and this vertue is their felicitie.

VII. Of Passions in generall.

Passions are the matter of Vertue.

They are the nailes, that fasten soule and body together.

Materia virtutis

In them we note their

- 1 Rising and increase.
- 2 Issues and consequence.
- 3 Prevention and stopping.

Their rising partly from

- 1 The soules nature.
- 2 The occurrences of objects.

The soule growes in passion

- 1 Not by the understanding part.
- 2 But by the sensitive part, which

The sensitive works

- 1 Abroad by the five outward senses.
- 2 Within by the imagination or fantasie.

The worke of the phantasie is to resume what the memory hath retained, and the common sense judged, and out of them to make collections of appearances.

These appearances goe masked under the habit of

- 1 Truth.
- 2 Good.

If of truth, they perswade a weak understanding and so breed, viz.

- 1 Curiosity,
- 2 Folly,
- 3 Giddines,

and

- 1 Hereticks,
- 2 Poets,
- 3 Fond students,

These erre in the Theorie.

If of good they perswade a weake will, and breed some passions, which make men vicious and erre in the practicke: That which makes a fancy venturous and resolved in these collections, is opinion proceeding naturally from the soule; and as phantasie is a part of it, so opinion must be the issue of it.

Hence arise the tenents against the Stoicks.

- 1 Passions are a naturall part of the soule.
- 2 They may bee moderated well from their excurrance, but cannot bee thoroughly barred of their existence in us.
- 3 They are not in themselves evill, but in their degrees.
- 4 They are often profitable, and meanes to further vertue, as feare teaches us to avoid evill, selfe love to prosecute our good, Mercy and pity teaches a King: Clemency and anger whereth our valour.
- 5 Their excesse is not positively evill, but upon circumstances, as with my friend I may bee angry for his fault, but bee reconciled againe: with my foe I may be more implacable.
- 6 Though strengthened by opinion, yet not proceeding from without us, but naturall apprehensions within.

7 In a man two parts { Understanding } both in reluctance to the other.
Sense

1 Understanding takes the good of most worth for honesty.

Hence ariseth conscience, or *conscientia*.

2 Sense takes the good of most { Pleasure } hence are passions.
Profit.

The will hath two inclinations { Reason, or
to follow, either } Sense.

In judgement we often condemne, what in passion we prosecute.

Vides malitiam, probasque;

Deteriora sequor.

Objects that move our phantasie, are { Evils to be avoided.

Goods to be followed.

The ground that perswades our soule to apprehend these objects, is selfe love.

This as it is { 1 Ruled by reason is good: and the duty of man.

{ 2 Ruled by sense is bad: and purseth passions.

It may bee defined, An inordinate inclination of the affecting too much pleasure of the body against the prescript of right Reason.

The issues of passions, are { Generall.

{ Speciall.

1 The Generall are:

1 Rebellion against reason.

2 Division in themselves.

3 Insatiable in their extent.

4 Importunate for action. Hence they worke headinesse, and suddaine resolution.

{ 1 Foolish.

5 Desirous of things { 2 Inconvenient.

{ 3 Impossible.

6 Inconstancie of prosecution.

2 The speciall are:

{ 1 Raising the humours.

7 Driving the body to distemper by { 2 Altering the complexion.

{ 3 Forcing new motions.

As in feare the blood chilleth, in anger boiles, in griefe the heart closeth, in joy opens.

8 Blinding the judgement: The reason is,

The Understanding receives her notice from the fancies impression; which befriending passion representeth often to the judgement not true and real, but apparent and conerited shapcs.

9 Perverting our will.

The will inclineth ofner to passion, then judgement, because passion is given more to choice and liberty.

The judgement is precise and settled to one part.

The prevention of { Discover } them.
passions is to { Temper }

1 Discovery is had,

1 From the use of company: as *Augustus* judged of his two daughters *Julia* and *Livia*, finding one delighted to converse with grave men, the other with youngsters: pronounced the one stayed, the other light.

2 From the view of complexions: as the cholerick breeds anger, the sanguine pleasure, the melancholy sadness.

{ 1 Suddaine and

3 From the use of talke, { 2 Often.

{ 3 Personally impeaching

{ 4 Censuring.

2 To discover our selves observe wee what our enemies speake of us. They are ready to seize on what is faulty in us, when our selves are blinded with selfe love.

After the discovery our Passions must be tempered.

The temper of them must be reason and wisdom checking the sence, and stopping the excurrance of Phantasie.

Mén by reason teach birds to speake, dogs to hunt, horses to curvet, though sence perswade the contrary.

And wee discharge our selves of the meate wee have eaten with pleasure, when we heare it was polluted or forbidden.

The way to temper them is not to root out but to prune them, as the taming of Horses is not to take away their motion, but their skips: And *Lycurgus* should not so much cut downe the Vines to barre drunkenness, as have planted cisterns of water to have allayed the heat thereof. It was *Zeno* his saying of muscull instruments, that even barren wood and dead guts would speake, if strained to their pitch, and ranked in order.

Wisdom must be our Astrolabe to take the height and elevation of our passions, if they over-grow.

Our wayes to slacke them are,

1 To bend to the other extreme; as if my sight bee scattered by view of white, I must regather it by viewing a black object: And *Epaminondas* way to stop his surfeit on sweet meates, was to close his banquet with a draught of vineger.

2 Abstinence from things hurtfull, though lawfull.

3 Stop all occasions, that are motives to set passion on head.

4 Barre selfe conceits, and fancifull apprehensions.

5 Yeeld not to inconstancy and fleeting.

6 Labour to mortifie the flesh.

If Passion be too violent, that we cannot slack it, our labour must be,

1 To stay execution; As *Archjar* professed to his Bayliefe that carelessly kept his ground, that were he not angry, he would tell him part of his mind: And *Plato* would not himselfe beate his man, while hee was moved, but gave him up to *Spensippus* to be handled by him.

2 To conceale it in what wee may, for it breeds disrespect, if wee open our yeelding to it: this made *Plutarch* to bee upbraided by his servant, when hee could not dissemble his anger, that it was a shame for him to bee angry, sith hee had written a booke to the contrary.

A man (saith *Plato*) is sometimes his owne lord, when reason rules him; sometimes his owne vassall, when sence and passion.

VIII. The division and number of Passions.

The bent and aime of all Passions are either, { The gaining of a good: The avoidance of evill.

Good & evill { are { gained { by 2. inclinations { 1 The concupiscible that affects. & evill { avoided { of the soule, { 2 The irascible that prosecutes & ventures on what we affect.

Both these have their objects { Good: Evill.

The attainment of the { Good breeds pleasure. Evill breeds griefe.

Thence { Pleasure { are the heads of all passion. Griefe {

The Passions aiming at good are either

| | | | |
|--------------|---|--|--|
| 1 Love. | } | these proceed from the concupiscible : | |
| 2 Desire. | | | |
| 3 Hope. | | | |
| 4 Boldnesse. | | | |
| | 5 | Pleasure. | |

The good presented is affected first by

| | | |
|---------|---|--|
| Love. | } | these proceed from the concupiscible : |
| Desire. | | |

Then it is prosecuted for attainment by

| | | |
|------------|---|-------------------------------------|
| Hope. | } | these proceed out of the irascible. |
| Boldnesse. | | |

Then being attained there resorts pleasure : this onely for the good present, the other for the good absent.

The Passions aiming at the avoidance of evill are :

- 1 Hate opposite to love.
- 2 Abomination or detesting, opposite to desire, being but the vehemence or high degree of hate, as desire is of love.
- 3 Despaire opposite to hope.
- 4 Feare to boldnesse.
- 5 Paine or griefe the issue of all, when the evill is in presence.

As

| | | | | |
|---|-------|--|---|-----------------------------------|
| { | Goods | come nearer or farther off their attainment, | { | Pleasure |
| | Evils | | | so they partake more or lesse of. |

These 10. Passions are simple, seeing they partake either of Pleasure alone, or griefe alone.

There are seven mixt Passions..

These worke either

| | |
|---|----------------|
| { | on our selves, |
| | or on others. |

- 1 They that worke on our selves are 2.

| | | | |
|------------------|---|---------|------------------------|
| 1 Shamefastnesse | { | mixt of | 1 Feare for infamy. |
| 2 Repentance | | | 2 Sorrow for fault. |
| | | | 3 Desire of amendment. |

- 2 They that work on others, are either
- | | |
|---|---------------|
| { | for them, or |
| { | against them. |

1 For them are 2.

- 3 Pitie whose object is the evill of another, which wee would have removed.

Mixt of

| | |
|---|----------------------------------|
| { | Griefe for the evils befalling |
| { | Desire for the removall of them. |

- 4 Zeale, conceived in the behalfe of one we love.

Mixt of

| | |
|---|---|
| { | 1 Griefe for the wrongs done. |
| | 2 Anger against the party wronging. |
| | 3 Love to the party wronged. |
| | 4 Boldnesse to right him in what wee may. |

The Passions that worke against another, are either

| | |
|---|-------------------|
| { | In thought onely. |
| { | Or in deed. |

1 In thought, 1.

- 5 Jealousie or suspicion mixt with
- | | |
|---|---------|
| { | Griefe. |
| | Anger. |
| | Feare. |
| | Hate. |

2 Indeed, 2.

- 6 Anger mixt with either
- | | |
|---|------------------------------------|
| { | 1 Griefe for wrongs. |
| | 2 Hate against the party wronging. |
| | 3 Desire of revenge. |
| | 4 Boldnesse in venturing. |

- 7 Maligning : This is different from anger, sith anger is moved upon wrong done : This without that motive : onely because it is well with another.

This

This contains { Envie, muttering at anothers good;
 Emulaxia, joying at others fall.
 The former mixt of { Hate.
 Griefe.
 Desire of falling.
 The latter of { Hate.
 Joy for the evill fallen.
 This of Passions in generall.

IX. Of Love the first Passion.

The object of Love is goodnesse; the issue joy and content.
 It is either with or without Passion.

- 1 Without Passion its in { God. } both have wills which are the affectors
 Angels. } of good, and this affecting is Love.
 Reflexe to him selfe.
 1 Gods love is partly in { Communicating good to others.
 Viz. The creatures.
- 1 By reflex into him selfe, he views his owne goodnesse: and goodnesse is the loadstone of love.
- 2 He communicates to { Nature.
 creatures, goods of { Grace.
 1 Nature is generall to { Creation } In this is the true *Bonum, Entis*,
 all, and comprehends { Preservation } which God loves
 the works of { temporall.
- 2 Grace is speciall to some { Redemption, } In this is the true *Bonum moris*,
 & comprehends the spi- { Satisfaction, } and this is Gods love.
 rituall acts of his love as { Glorification.
- 2 Angels love is by contemplation of { God.
 the works of God.

They see in all perfection of good, the fountaine is God, the streames scater into each part of the world: Things they cannot hate, onely sinne they hate which is as nothing.

This love hath these tenents.

- 1 It is in the best natures, and the perfection of them.
- 2 As the best things are most lovely, so they are most in imparting their loves to others.
- 3 It is impotence to be hating, envying, murmuring, all which are opposite to love.
- 4 It cannot bee perfect in man, it is truest in God, and nature; these are not interrupted by Passions.
- 5 The bond of Matrimony hath not truly this love, sith it is spiced with lust: wee may rather tearme it the Union of affections willed by God for avoidance of further evill.
- 6 It works for the best things with reluctance to sense.
- 2 Love with passion is either { Proper.
 Improper.
- 1 Love improper is in beasts, *scilicet* the Emperesse of Nature.

Birds build their neasts, and spare their owne crows to fill their young ones: the Partridge flags before the Faulkner, and ventures the taking, that her young ones may escape. The most timorous creatures grow most resolute in these combats: In the worst natures are some sparkles of love: As in Gold mines amongst much earth shines a luster, and in beasts are rude lines of mans naturall

naturall affection: As in wild figs and olives are the spices of the sweet, though in harsher maner:

2 Love proper is in men alone.

It is either of { our selves,
or others.

1 Love of our selves called *pharisa* either { 1 True according to reason,
2 Fancied according to sense.

1 True selfe-love apprehends that which is simply good, both in present and future.

It respects the goods of the soule before those of the body.

It chooseth the lesse good of most durance before the greatest good of lesse continuance.

It is the well-head of Charity.

Charitas incipit a se ipso.

And the spurre of Vertue, sith by it we bene fit our selves.

Properties.

2 The properties of it are { Wishing } the best to our selves.
Working

3 Consent with our owne parts, as of { Reason,
Passion,

4 Loving to retire into our owne thoughts.

5 Joying at our owne good, and grieving at the contrary.

Hence it is the attribute onely of good men.

1 The evill follow shewes, and opinative good, which failing breeds sorrow: the good man aimes at truth, and therein consents himselfe.

2 Conscience suffers not the evill to view their owne thoughts: they are at odds with themselves; Sense and Reason are hard at combat with them: Love cannot be there, where there is difference.

3 Selfe-love causeth Joy: Evill men, though they have joy of sense, they have griefe of reason, and their joy is not for durance, but ends in repentance.

4 Intemperance is the badge of evill men, whose { Soule,
Body.

A good man so loves himselfe, that he will either stop raising, or labour their laying.

5 As goodnesse is wisdom, so evill is folly, which blindeth us, that wee cannot distinguish the good from the evill, but chooseth at randome, and so prove our selves without selfe-love.

The opposite of selfe-love is either a stupid neglect, or a desperate hate of himselfe, they that mangle themselves, are of this ranke: Selfe-love fancied according to sense is the badge of fooles; It is the seed plot of Passion, the bath of Flatterers, the nurse of vices in manners reall, of Phantastick humors, in manners of Complement.

It ariseth from 3. heads, viz. { 1 Blindnesse of understanding.
2 Easinesse of comparing our selves with others.
3 Partiality in judging to our owne side.

The Issues of it are 4.

1 Admiration of our selves.

2 Arrogancy of speech.

3 Ease excusing our owne faults.

4 Despising of others admonition, and counsell.

The wayes to restrain it are.

1 Prize the Act of any above thine owne particular, as many eyes see more then one, and many hands make better riddance.

2 Amplifie others vertues, depressing thine owne.

3 Be sparing in vaunts, seldome in excuses.

This selfe-love barres the admittance of goodnesse; it comes not, unless it be

bee

bee sought. Sought it cannot bee, unlesse it be acknowledged wanting: Selfe-love barres this acknowledgement.

Multi ad solidam eruditionem pervenissent.

Nisi se pervenisse iam putassent.

Love to others is directed either to } God,
or our
Neighbours.

1 Love to God is onely in a sanctified will, none can truly hate him but sinners: The reason is because, God is Love, and sinne is in opposition to God.

2 Love to our Neighbours is either to } Enemies,
or
Friends.

1 Love to our enemies is one of the cunningest points of *Charity*, and an imitation of the Divine nature.

1 Pardonning them, if they repent, as the Lions doe the beasts, that submit themselves.

2 Pardonning them, though persisting, and being without submission.

3 Not pardonning them onely, but working a good for them.

The Necessity of this Love is,

1 Because God loveth us being his enemies, and we must doe, as we would be done unto.

2 There is none so bad but hath some what excellent in him, and none so harmed us now, but he may doe us good hereafter, and for this is to be loved.

2 Love to our friends is either } for publicke respect,
or
private, and particular.

1 Love for publicke respect is the love of our Countrey, that is the duty of all; but it is most splendent in heroicks, who pawne their life for it.

It was questioned, whether this love was ingrafted by nature, or assumed by custome? *Ob. Lipsius.*

1 If it come by nature, why doth not the poore love as well as the rich?

2 How comes it, that many for gaine leave their countrey, never to returne, sith where we love, we love to converse: Some have been Traitors against it, and *Neroes* to fire it.

We answer: Nature cannot bee so strict, right, and even, but sometime shee breeds Monsters: gaine may withdraw mens hearts, and fasten them to forraine Coasts.

The poore love their home, but rich men more, because they reape the goodnesse of their Countrey in a larger manner.

Mens love of Countrey is first for themselves, as wee feare stormes, lest our selves pinch for them, and wee quench a fire, lest our owne houses bee fired by it.

2 Love for private respects is either } 1 Ascending to our Superiours.
2 Descending to our inferiours.
3 Betwixt equals.

1 That in descent is farre more hearty then that in ascent: Hence fathers are more loving to children, then children to fathers.

2 That betwixt Equals stands upon more indifferency of points; and in the best counterpoise of either they may fall to jarring: Hence brothers and sisters fall to jarring, and friends have many distastes.

These Loves are linked either by bond } Naturall,
or
Civill.

1 The Naturall bond is three fold.

1 Under God to parents, who } 1 Honour.
challenge of us } 2 Maintenance, if need so require.

It

It was *Solons* law, that none should be free from their duty but those that had learned no trade of their fathers.

Parents are either of {
1 Blood, that frame us in body.
2 Manners, that by direction frame us in Soule; such are teachers.

It was *Socrates* his tenent, that by nature both these had challenge of Love: it is also doubted by many, whether *Alexanders* debt was not as ample to *Aristotle* his Master, as to *Philip* his father.

2 Our bond of nature is to {
Brethren.
Sisters.

They challenge of us,

- 1 Counsell.
- 2 Liberty of Conference.
- 3 Pleasure of Conversation.
- 4 Helps of Fortune; So wee wrong not our selves over much in furnishing them:

*Vivet extento Procul ejus avo
Notus in fratres animi paterni.*

Brothers love is {
1 Honoured by our friends.
2 Envied and feared of our enemies.
3 Usefull to our selves.
4 Joyous to our Parents.

King *Enmenes* his Mother professed her selfe happy in this, that of 4 Sonnes 3 yongest squired the body of the eldest, and that *Enmenes* was nothing jealous or mistrustfull of them: Nature hath made them in a family feet to beare up our body both in equality and proportion; If they exceed, they cause halting, if they trip at one another, they cause falling.

A Lady of Persia made it a great dispute, whether they were better to lose her brother, or her sonne; she said they could get a new sonne, but a brother, sith her Parents were dead, they could not.

Brothers dislike (it may be) oftē admits remedy, but their hate is irreconcilable: As the Joyntures of Art, though riven with rents, may be glewed againe, but Natures breach cannot.

The speciall Motives of their dislike are 2.

1 If we leave their commerce, and follow strangers, as if we should cut off our flesh and inch in the roome of it a strange peece: And the Arcadian Poet in *Homer*, when he had lost his legge, for his best helpe was to hoppe on a legge of wood; strangers will be distrustfull of us, sith we leave our owne.

Can you stile your friend brother, when you cannot account a brother your friend: as absurd a thing, as if you mangled his naturall body: but hanged his Idoll with laces and Garlands.

2 If we are alwayes checking, and thwarting their courses, as *Laco* said, by his short wife, of 2 Evils, the least is to be chosen: So if our brother be bad, rather let him have his fourth, then demerit his hate.

Though the dog bite and the horse throw us, yet we keepe them, and wee suffer Apes, Cats and Lyons, though sometimes harmefull.

Winking at faults in company is usefull; when wee would not displease, though it be not so honest, yet for avoydance of further Evills, it may be tolerated.

We must be our Brothers Friend, not his Judge.

3 Our bond of Nature is to our kinne either of {
Blood,
or
Marriage.

both galling offices of love proper to the family.

as Invitation {
Marriage scalls.
Funeralls.

- 2 The civill bond of love is to { 1 Citizens. 2 Countrymen. 3 Strangers. } As particular respects va-
ry, so this order va-
ries.

It is the engaging of man unto man in heart began by use and acquaintance:
It acteth as one Soule in 2 Bodies.

There are two branches of it { 1 Willing. 2 Endeavouring the best for another not for his
owne but the others sake. }

The maïne motives of it are the { 1 Pleasure. 2 Profit. 3 Honesty. }

- 1 Pleasure { are the aimes of Epicures; loves as they are diverse, and fancifull, so
2 Profit { such loves must be.
3 Honesty { makes love more seded: it appeares not as *Alcibiades* changing his
coat to the fashion of the Place, but as *Socrates* keepes his tenor.

This love gets his growth by 3 knots { 1 Affecting. 2 Acquaintance. 3 Trust. }

The Twine to winde and fasten it must be a Resemblance of Manners.
Motives to make me affect one

- 1 I see him sympathize with my { Joy } { Griefe } { befriending *Brutus*.
2 He accounts my friends his, and my enemies his; So *Cicero* loved *Appian*
Pulcher for *Brutus* his sake, and by it bound *Brutus* the more to him.
3 He is pleasant-hearted and jesting; If I jest with him he takes it not amisse.
4 He reports well of me behind my backe, and rather in secret shews his mind
then in publike it should be told me.
5 He delights in my Company.
6 He goes neat, but curious in apparrell: this was *Demosthenes* and *Hortensius*
his trick to get them favorites, when they first began pleading.
7 He lives peaceably with others; which perswades me, hee will doe so with
mee too.

These things may move affecting in { Flatterer } { Dissembler } may doe as much.
me not acquaintance, fith the { }

Motives to moove me to acquaintance.

- 1 He reports well of me before mine Enemies, and if they except, he defends
mee.
2 I see him honestly given not giddily.
3 He doth me a good turne, so it be no prejudice to himselfe.
4 He is no busie-medler in my matters.
5 He overthwarts me not in talke, especially being eather serious or angry.
6 He keepes the 7 former motives without dissimulation. These move ac-
quaintance, and I would trust him in matters obvious, and ordinary, but in
things secret, and neerely touching me, I may not, unlesse he had Wisdome joy-
ned to his Honesty.

Motives to move me to trust him.

- 1 He hath all the 7 former circumstances without dissimulation and the 8 latter
with wisdome.
2 He is wary, that he be not felt by others to open himselfe by Ignorance.
3 He doth me a good turne though to his owne Preiudice.
4 If I have wronged him, he will not revenge it, though having opportunity.
5 He suffers wrong for my sake.
6 He discloseth to me his heart, opens his faults, sheweth me his hopes and
feares.
This makes the upshot of love, and the Bond of Friendship. As the Diamond
engraves the Diamond, and fire encreases fire: so his love encreaseth my love,
and

and makes up an Union betwene us.

Satiade Amora prima Passione.

X. Of Desires be 2. Passion.

Desire is the stoppe, and scale of Love: it addes vehemency to our affecting. The object of it is some pleasing good; The issue delight.

Goods are made pleasant unto us either by { Nature or
Custom.

- 1 By Nature are such as in themselves have no Paine.
- 2 By Custome the hunts-man affects the cold winters walkes, and the student loveth his watchings; and they are desirable to him, though in themselves painfull, but are pleasant for the End.

Desire is partly { with Hope,
without hope.

- 1 If a thing desired be within compass of attainment we raise up our powers within, and watch helps abroad to gaine it, then desire is joyned with Hope.
- 2 If it be not likely to be gained, it leaves hope, and spends it selfe onely in wishing.

Thus we desire { Mines of Gold } though there be no hope or expe-
{ Managements of States } ctance of it
About Desire are these Tenents.

- 1 It is a note of want, and Impotency. Hence the covetous are said alwaies to be wanting in their greatest Abundance.
- 2 It is never but with griefe, till the thing be obtained, and in the attainment it ceases. Hence it cannot be in God, seeing in him is no Want, Griefe, or Possibility of Nature.
- 3 We cannot desire things, we know not.
- 4 It is limited onely by satisfaction; without it growes eager importunity.
- 5 It is grounded onely upon Sence: Angels properly have it not, nor Plants.
- 6 It appeares first in beasts: In a more pregnant manner it is in men, seeing in them the sensible part is more various, as having opinion to float and to cast their desire to infinite resolutions which beasts want.

Desire is either { Proper,
or
Improper.

- 1 The Improper is an Inclination to the regaining of a Good; this is called *Appetitus naturalis*, by which the Earth beareth downeward, the fire upward, and it appeares in all naturall bodies.
- 2 The Proper is in men principally.

This is for the bettering either of the { Reasonable part,
or
Sensible part.

- 1 For the reasonable, there is a desire of knowledge naturally in-grafted in the Soule.
- 2 For the sensitive part, the desires are { Meats,
either necessary as of { Drinks.
Naturally not necessary, as Venery, which though it be necessary to man in *Species*, yet is not to this or that man in *Individuo*: Neither naturall, nor necessary as all Phantasies and conceited Appetites.

The 2 former are common to men with beasts.

The last comes by an Opinative apprehension of Colourable goods, it opens it selfe most in excess of things: It growes boundlesse and infinite, for as opinion is infinite, so these desires brooded and hatched by it must be infinite.

Fancied

Fancied Desires are, either { Extraordinary.
 Ordinary.

1 The extraordinary are caused by diseases, as the cholerick desires honey, the Fever-sicke wine, others eat chaffe, coales, &c. or are incident to great bellies, whose longing proceeds from a raw cold Humor: If they faile of it, they either endanger themselves, or their infants: it comes especially, when they travell for Witches. The Low-countrey-women of all others are most given to these desires, because of their coldnesse of temper.

2 The ordinary ariseth from voluntary Passions.

They bend either to { Pleasure.
 Profit.

1 The desires bending to Pleasures are mainly to sooth the five senses. These are craving and excessive, all joyned make up luxury. *Cleopatra* in her voyage to *Anthony* had all these: odours for her smell, musick for her eares, cakes for her tast, costly hangings and soft pillowes for her sight and touch.

The like was noted of *Antiochus* in his warres against the Romans.

The two senses that luxury { Touching.
 seeks to please, are { Tasting.

From these arise two im- { 1 Lust for Venery. { 2 Meats.

portunate ones. { 1 Liguorousefse for { 2 Drinks.

The exortences of both these are a certaine signe of a corrupt, lewd, and im-temperate soule.

1 Lust is in beasts, but exceeds in men.

1 Beasts have it but at set times, men at their pleasure, *ad Libitum*.

2 Beasts have it lesse violently, men, so, that many have wrought their deaths for it.

The onely way to allay it, { Right reason.
 and to excell beasts is { Religion.

Our caveats against it must { 1 Words.
 be to avoid wanton { 2 Gestures.
 { 3 Meats.

It never admits moderation, and warrantize, but onely in the bond of Marriage.

2 Liguorousefse for meats and drinks aimes not at necessity, but pampering: thence it cannot be truly in beasts, who feed not but for hunger.

Eating overmuch.
 Too greedily for the time.

This Desire is seene in us, either { Inseasonably at all times.
 Feeding rather on delicates,
 then strong meats.

It is *Sextus's* saying of the Belly: *Parvo contentus est, si des illi quod debet, non quod potest.*

2 Desires aiming at profit { Wealth, as Covetousefse.
 are either of { Honor, as Ambition.

1 Covetousefse is for the Purse, it gapes after money, either to have it only in possession, this is Parsimony: or to have it for Use and purveiance, not of nature, but of superfluities: This desire may be termed Vaunting, or ostentation.

Parsimony is onely to have, not to use: It is the truest note of poverty.

Increase rather feeds, then allays it: hee that still drinks, and cannot bee satisfied, needs rather purging, then filling.

These extort from others not to benefit themselves: but wee rather hate the Viper, that stings onely to kill, then the Beare or Lion, that kill onely to eat.

They make others to want: yet themselves are like the Bath-masters Asses, that carry on their backs the Rubbets and the cleansing Towels, yet they themselves are all miry with filth: they never profit, but by their death. As a kind

Livinus Lib.

Plutarch.

of mice feeding in the gold-mines eat the Oare, yet redeliver it not till they be exenterated.

This desire growes infinite, and ariseth from 3. heads.

1 Imitation of them, whom we see to prosper and we wish to be as they are.

2 We make Wealth our End, not our meanes *Concupiscentia finis solum infinita*; meanes to Ends are bounded, sith the end is beyond them.

3 Riches are for Use; they are not of themselves good: As man cannot bee sure of his estate; but hee may require helps from them, and as losses are ever imminent, so riches are ever desired for prevention: Desire of money for Ostentation aimes wholly at superfluity: if at necessities, the poore might equall the rich in this Kind: And *Diogenes* might by this as well vaunt himselfe in his Tubb, as *Alexander* in his Throne. One came to *Scopa Thessalus*, but to beg some of his superfluous stufte, his answer was, That the grace of his Wealth was seene in superfluities rather then in necessities. If *Ismenias* at *Thebes*, and *Callias* at *Athens* both the richest of their times, bare no greater port then *Epaminondas*, or *Socrates*, wee might terme their Wealth blind, and heartlesse: Therefore *Telemachus* in *Homer* passes over *Nestors* household, where all was frugall, nothing superfluous, but amplifies in rich termes the gaudie and costly furniture of *Menelaus*.

This Desire ends in expence, as the former in keeping.

They are opposed as Logicke and Rhetoricke, the one resembles the hand in spreading, the other in closing.

Logicke is for the Covetous to learne to count *λογισμῶν computo*. As Rhetoricke for the Vaunter to vent, and utter himselfe: this is the chiefe factor for gaines both to antique, and moderne pleaders.

Ciceroni nemo ducentos

Iam dederit nummos, nisi fulserit annulus ingens, &c.

The way to stop both these golden desires is contentation in our present estate: this is called by *Socrates* the Soules riches.

Brevissima ad divitiarum per contemptum divitiarum via.

2 Desire of honour termed } Low and competent } Honours.
Ambition, is either of } Highest and best }

It ariseth from two heads,

1 Presumption of our owne worth.

2 Pride over others.

The abates of it are } Humility in respect of our selves.
} Charity in respect of others.

As wee may not meerey want this desire, so wee must not let it exceed in us; the excesse breeds envy in all; the defect is faulty onely in those, which have desert, occasion, and fit meanes to gaine their honour.

Men of worth to extenuate their goods, and gifts, when necessity requires their triall, is to bury their goods with them, and to wrong the Weale publick.

This desire in the meane is onely allowable.

If it bee of lower Honours it is termed Modesty, if it perch to the highest, it is magnanimity, and is onely for great hearts, and the best perfections.

Both these are grounded on foure conditions.

1 That wee challenge no more honour, then what in the opinion of the best we have deserved.

2 That we get them by lawfull meanes, not by out-stripping others.

3 That we rest without seeking more, having gotten the former.

Unless they be } Easily offered.
} Forcibly put on us.

4 That wee keepe our Place, and defend it against all back-biters, and murderers.

Satis de cupiditate secunda Passione.

XXI Of

XI. Of Hope the 3. Passion.

AS Love and Desire is { Hope } to prosecute it.
to affect good, so { Boldnesse }

The 1. former come from the concupiscible, as a lord to will.

The 2. latter as a steward to purvey, and proceeds from the Irascible.

Love is the base to Desire; so Hope to Boldnesse.

- 1 It is alwaies the apprehender of Good.
- 2 The goods must not be in presence, but in future.
- 3 It must be of a thing not easie, and without search, but hard to compasse.
- 4 It must not be so hard, but it must apparantly be in possibility to attaine.

It hath these Tenents.

- 1 It is never without assurance, though not of the thing, yet of perswasion.
- 2 It makes us take delight in things painefull.
- 3 The surer the hope is, the greater is the joy, when the thing is attained.
- 4 It brings security, and barreth feare.
- 5 The adjunct of it is Expectation; herein is some grieve sith wee yet want the good, which we would have in presence.
- 6 It is a note of imperfection of being: whence it is onely for this life, it goes not beyond.

- 7 It moves our powers of { Body } for atchievements.
{ Soule }

The Persons given to Hope are,

- 1 They that either have deserved, or intend to deserve well of us.
- 2 They that have potency of friends and best meanes..
- 3 They that have hot and quick spirits, which enlarge our hearts to attempts.

Hence young men, and drunkards are most given this way.

- 1 For the coldnesse of temper, making them unfit to attempt.
- 2 For their experience of many dangers, and stoppages, which contrary, and crosse their hope.

- 4 They that quickly apprehend the good, but fore-cast not the stoppage in the way, that hinders the good: Thence fooles, and inconsiderate persons build onely upon hope.

The kinds of Hope.

Hope is either { 1 Naturall.
2 Supernaturall, or
Theologicall.

- 1 The Supernaturall is a Vertue onely infused by God.

The second sister to Faith.

- 2 The Naturall is either { Charity.
Improper.
Proper.

Improperly it is in beasts: As the Dog springs the Deere within compasse of attaining, hopes to take him: So the Hauke the Partridge.

How should beasts have hope, sith hope comes from the Understanding?

Beasts have their naturall instinct which proceeds from God, and understanding without them: by it they judge of things future, as the Emmor fore-sees the cold Winter, Mice leave the house, when it begins to fall, and Ravens oft foretell weather.

- 2 Hope Proper, is in men onely.

Object.
solut.

It

It is either of things } Necessary, that must be.
 } Possible, that may be otherwise.

1 Things necessary are hoped for: as the Jewes calling, the worlds end, the Resurrection, which cannot be otherwise, because God hath appointed it.

Things Possible are attained } Partly by our selves.
 } Partly by others.

Then our Hope relies much on others helpe.

Motives to raise hope.

1 Shew the meanes to be strong and pregnant.

2 That the evils feared are not in proportion to the goods expected.

3 That to men of religion wee must not urge the generall onely but the particular providence of God.

4 To grave men use rather few and strong reasons, then many and weake: To the common sort use probabilities rather of circumstance then realities of substance, because of ignorance they are led most with conjectures.

Satis de Spe 3^a Passione.

XII. Of Boldnesse the 4th Passion.

Boldnesse heartens our Hope, as desire doth our Love.

Its object is mixt } Evils to be removed.
 } Goods to be attained.

It goes under the name of Conscience and Courage: It begins with reluctance, and struggling, but ends with Victory.

Courage is either } Suddaine upon Sense.
 } Deliberate upon Reason.

1 That upon Sense grounds onely upon a presuming hope; weighs not every occurrence of danger, begins with resolution, but seeing dangers arise unlooked for, slackes and often failes, before it overcome: Thus quicke in the onset, but slow in the issue.

2 That upon reason begins slowly, endeth ventrouly, viewes every circumstance, fore-lays the uttermost of dangers: If it happens lesse then his account, it heartens him the more, hee resolves to conquer by out-facing danger.

An example of both is scene in *Lucius Paulus*, and *Terentius Varro* the 2. Roman Generals at the overthrow of *Canna*.

Courage hath his two extreames } Heady rashnesse.
 } Base cowardize.

The parties most courageous are.

1 Whose temper of body is such, that they are hot spirited; which happens in three sorts of men.

1 Whose heart is little, because of combring and closing of spirits, whereas in the larger hearts their diffusion causeth feare.

2 Whose lungs are greatest and fullest of blood; This argues plenty of heat and much quicknesse.

3 Who are heated with much wine: Thence the *Germans* used it principally in their consultations of Warre: And *Alexanders* drinking was thought to adde somewhat to his courage.

2 They that have many and strong helps, are ventrous.

3 They that be most subject to choller.

4 They that rely on Gods promises, and cast their hopes upon him.

Hence it is that Martyrs are most resolute.

5 They that have a conscience of their innocency: on the contrary they are most fearfull, which have beene most injurious.

6 They that have oft escaped dangers: hence old Souldiers are more venturous then fresh-water-men.

7 They that see not inconveniences, and stops: Hence the wiser sort are more cautelous, and none so desperate, as he, that fore-sees least.

5. Motives to make couragious.

1 Shew the excellence of the Victory: the meanes easie, and present that must compasse it.

2 If our equals and inferiours have overcome: why should not wee hope the like? It was *Cicero's* argument to perswade the sufferance of evill. If children at *Sparta* could endure stroakes without groaning, why should not men? And amongst men if the barbarous vaunt before their enemies, why should the learned tremble?

3 Set them into anger: this makes a boiling of their blood, and by consequence courage: Anger is wrought by laying open their wrongs and disgraces offered without a cause.

4 Shew the { Paucity of their enemies, { Will not }
Weaknesse { that they either } Dare not } oppose them.

5 That in former combats they have had successe, and why not in these standing in the same proportion.

Our maine worke must be to { Perswade hope. }
{ Expell feare. }

Satis de Fiducia 4^a Passione.

XIII. Of Pleasure the 5th Passion.

This is the aime and up-shot of the 4. former Passions.

Love {
Desire { are like the qualities of lightnesse in fire, which inclineth
it to make { Hope {
Boldnesse } like the motion or passage of it.

Pleasure results as the quietnesse and rest of the Soule in her object: it is never hearty before the goods are in presence.

It is generally in men and beasts; it is termed properly pleasure, or delight: As it is in men by opinion, it is called Joy, *Gaudium*.

This in men hath 2. { Enlarging the heart: hence properly it is called
operations, &c. { *letitia, quasi letitia.* }
2 Forcing outward gestures; and so it is called *Exultatio*.

Aquinas.

The tenents touching it are.

1 No Passion is so vehement: So that many have died of it; the reason is because it opens the heart, and being overmuch passes out the spirits that keepe in life.

2 The greater joy, the greater content, and in men it is the consequent of happinesse.

3 It is never true, and of continuance, but where there is peace of conscience.

4 It is the adjunct of Vertue.

5 It is increased by variety of objects.

6 It purifies the soule, helps concoction, expells superfluities.

Hence the metry have { Good wits,
{ Faire complexions.

7 It is for goods present: though wee joy for remembrance of things past, or for hope of things future, yet they are apprehended by us in a sort of presence.

Motives to raise delights in a man are,

1. Perswade him to a } Love } of those things, wee would have him de-
2. Marke his inclination, fort, profession, and frame your selfe to the like } Desire } lighted in.
3. Amplifie the goodnesse of the thing, we would have him delight in, not by describing it in grosse, but viewing every particular: Thence Poets in their love-legends describe every part of their M^{rs} the more to delight.
4. Shew the continuance of this Joy, that it breeds not after-repentance. Variety causeth delight, and uniformity raiseth loathing.

Pleasure is } Common to men with beasts.

Proper to men alone.

1. That in common is the issue of Sense, and comes from a naturall appetite.

It is } Negative for the avoidance onely of trouble.

Positive for the gaining of some reall good.

This grounded on two } 1. The attaining of a good convenient.

conditions, viz. } 2. The perswasion that we have attained it.

2. That proper to men is voluntary and hatched by Opinion.

It is ei- } Mind, or } The pleasures of the mind are best, } Prone
ther of } Body. } yet all not warrantable, as the } Malicious } take de-
light in the passions, yet their minds are corrupt: these begin in hope, but end in shame and grieve.

The truest delight of the mind } 1. Meditation on God, and heavenly
without repentance is } things.

2. The view of learning.

Eudoxus wished to bee burned with *Phaeton*, so he might stand neere the Sunne to contemplate the nature of it: And *Archimedes* left not his drawing of lines, till a sword was drawn through his body.

Pleasures of the body are sensuall, and quickly exceed Measure.

1. Inconstancy and fleeting.

2. Society, and cloying like rancke meat.

3. Ending in repentance.

4. They quench the thirst no more then salt-water, that
wets the palate, but inflames the stomacke.

They are perswaded by three enemies, } 1. World.

2. Fleish.

3. Devill.

The Worldlings take } Present } Joy for future, and reall paine.

Apparent }

The good had rather suffer heere, and play hereafter.

Sensuall pleasures proceed from the diverse affecting of the Senses, as musick, and odours affect the eare and smell, pictures the eye, &c. The strongest delight comes from the Sense of touching. The reason is, Delight is caused of Love: we love those things that most besteed us; of all the Senses touching is most usefull, without which it is impossible we should live: And as the goods affected by it are more deare; so the pleasure, when it is attained, must be more moving.

These bodily exercises in their Excesse distract the minds, and hinder the use of right reason.

XIV. Of Hate and Detesting.

These are the two opposites of { Love. } Hate begins the dislike, detest-
 { Desire. } ing is the vehemency of it.
 The object of both is evill:

It is either of the { Thing.
 Person.

1 The thing hated principally is sinne, and for it we dislike of the Person.

Sinne is against { 1 Nature, this breeds { Moralists. } such all partake of na-
 the law of { the hate of either { Heathens. } ture and are bound to
 { 2 Grace, this breeds the hate of Christians.

2 The Person we may not simply hate. It is proper to
Vbiunque homo est, ibi beneficio locus est.

Three heads of sinne move hate { 1 Irreligion towards God.
 { 2 Injustice towards men.
 { 3 A selfe inclination to evils without out-
 ward motives.

If these heads grow stronger, and are done wilfully, it transcends hate, and
 moves detestation.

The principall object of it is Atheisme.

1 It is the ground-plot of all other finnes.
 2 It is an evill of Will, not of Understanding; wee cannot alledge igno-
 rance for that, which the creature reveales. It is voluntary presumption.
 3 Atheists are most unfit for Society.

Their commerce is either { 1 Scoffing.
 { 2 Impudency.
 { 3 Vaine.

of that constitution, as is most contrary to wisdom, and morall gravity:

These things move the greatest detestation.

Hate is either { In common against states;
 { Particular for private respects.

1 That is common wifes, if { Their religion be in opposition to ours.
 { Their lawes be against nature.
 { Their oft injuries done bee without hope of
 righting.

2 Hate for private { 1 Against a wronger of { 1 Tyrants.
 respects is { many, as { 2 Extortioners.
 { 2 Against a wronger of himselfe only for the indignity
 of his person.

This is set downe by its life { 1 Towards God.
 { 2 Towards himselfe.
 { 3 Towards his neighbour.

His entry into the world is shamefull, his stay, and departure hence with
 misreport, like a snuffe leaving a stincke, when the light is out.

Seis de odio, et detestatione.

C 3

XV. of

XV. Of Despaire and Feare.

These two are opposite to: } Hope.
} Boldnesse.

Their speciall Art is in avoiding the future evill, which seeing they cannot master, they yeeld.

1 Despaire ariseth from faile of helpes.

2 Feare from the imminence of evils.

The tenents of despaire are 3.

1 It dejecteth the minde.

2 It makes venturous to try the utmost of dangers.

3 It is deepest in them, who before had greatest hopes.

The tenents of feare are 3.

1 It is never moved, but where some spice of hope is, for things without remedy rather despaire, then feare.

2 The greater the things feared, and of longer continuance, the greater is the feare.

3 It prepares Patience, awakes industry, whereas despaire is only in suffering.

It ariseth from 3 heads: } 1 The debility of the person.
} 2 The greatnesse of the danger.
} 3 The certainty and imminency thereof.

Feare is either of a } Person.
} Thing.

1 Of a Person it is either: } 1 Filiall, which is properly love.

} 2 Servile, which is only for escape.

The persons most feared by us are:

1 Great men offended with us.

2 Lewd men made powerfull.

3 They who stand in bodily feare of us.

4 High stomacks wronged by us.

5 They, who have our life and credit in their hands.

As in themselves we feare:

1 Gainē.

We feare them either: } 1 To be provoked by

} 2 Threats.

} 3 Danger on their part.

} 4 Want of service on our part.

Persons not much to be feared are:

1 They that are soone angry, and soone pleased.

2 They which open themselves too much in menaces and threats.

3 They that disclose their purposes. The close heart conceals malice. *Vlisses* is said to dissemble his dislike for the *Woe* of *Antony*; but revenged them at occasion. *Antony* and *Delabella* find not *Cesar*, though they conspired against him: He answered he feared not those farr, and open field *Traitors*; but two leane ones *Brutus* and *Cassius* which proved his death-men. *Demissos animo*, *de vacuo* *brutus* *apprehens*.

2 Things feared are evils: } 1 Destruction to the whole man, or bringing either } 2 Baine to any part of him.

Evils are of } 1 Sinne, *malum culpae*, *et hoc in timore*
} 2 Punishment, *malum poenae*.

1 The former is feared by the best men.

2 The latter is feared by the worst.

The parties most fearefull are:

1 They, whose quantiry of heart is such, that it diffuseth the spirits.

2 They,

- 2 They, that know their owne weaknesse, and others ablenesse to hurt.
 - 3 They, that amplifie on the evils feared.
- The parties least fearefull are,
- The { Wise, } who count { Sinne, } which they endeavour to avoid.
 { Just, } no evill but { Disgrace, }
- 1 The most couragious.
 - 2 They that preferre honour before their lives.
 - 3 They that have strength of meanes to backe them.

Satis de desperatione, & metu.

XVI. Of Griefe.

Griefe is the end of the former Passions, and ariseth from the presence of evill.

Livinus Lib.

It is of { Body. } That of the minde is more dangerous.
 { Minde. }

The repents of it are :

- 1 It never touches things of absolute perfection, as God, Angels, &c. but is there most frequent, where is most plenty of evils, as in hell.
- 2 It drieth the body, and ingendreth melancholy by cold blood.
- 3 It makes one unfit for Action.

It growes upon us by { 1 Yelding too much to pleasures.
 { 2 Entertaining a conceit of evils present.

The way to resist it in our selves

- 1 Propose to your selves examples of Patience, as of *Marim*. *Ita tulit dolorem ; ut vir et ut homo majorem ferre sine causa necessariâ noluit.*
- 2 Resolve to resist evils. As that Souldier, that stands it out, often winnes, when the coward dies by flight. *Animi contentio sola officij tanquam custodia.*
- 3 That the evils now are not so great, but the goods ensuing counterpoise them.

The way to allay it in { Perswasion of a good to come.
 others is comfort. } Removall of an evill present.

In it are two things.

- 1 The time to apply it, when the griefe is ripened, not newly begun : As Surgeons first let the sore soften, before they begin to draw it.

2 The manner of applying it is { Generall.
 { Speciall.

1 The Generall by these places.

- 1 Shew how greater evils have happened to others, then we now suffer. It was *Socrates* his saying, If of all mens evils heaped together all should have equall share, each would rest content with their present estate.

2 Our evils be ordinary, and doe { 1 Cares of minde.
 what we can, we shall have { 2 Diseases of body.

- 3 If the thing be revocable, shew the meanes of regaining it ; if not, yet it is a folly to mourne for it.

4 That God sees what is better for us, then we for our selves.

2 The Speciall is according to the maine motives of Griefe.

1 These are { Death.

{ Temporall misfortune.
 2 Our comfort against death is.

- 1 It is unavoidable by fate, and all men must, and doe taste of it.

2 It is no evill, but a passage to a better life.

- 3 Our life hath many troubles, and anguishes, death is the quiet of them.

Of deaths they are most } Suddaine.
grievous, that are } Untimely.

3 The thing cannot be suddaine, sith we are ever liable to evil. Wee ought
ever to expect it.

This falling must end in depth of grief.

Sans de dolore.

XVII. *Of Shamefastnesse.*

It is onely in good natures, but unsteddy, soone failing, and easily revoked
counsell: It is commendable in youth, but not in the aged.

The effects of it are 2.

2 It calls blood into the face. Reason and Passion move the heart; the heart, the spirits, the spirits the blood.

Now shame conflicts Si Feare, that gathers blood to the heart.

of 2. Passions } 2 Love, that sends it abroad to the outward parts.

If wee feare onely disgrace, and have no love to good, our blood keeps within: This is the signe of a bad nature, which being convicted of faults lookes not red, but pale in the face.

If we feare not onely disgrace, but love and desire amendment, our blood
spreadeth outward, and causeth blushing. *Aristoteles* his daughter being as-
ked, what she counted the fairest colour, answered, the ruddy caused by an
ingenuous blush.

It is a note of the best natures, and fittest for counsell.

The reason why the blood sheweth it selfe most in the face is, because as the blood is moved by the spirits, so the spirits are most quicke, that animate the organ of sense: and the organs of sense principally are about the face.

The examples of shaming {I *had* an overbushfulness.

2. Impudence, the defect of shame.

Bath faïence

Bashfulnesse in it selfe is not evill, but may often be a prouocation to evill. It is grounded upon an overlenity of nature, and easinesse of yeelding. The object of it is feare of infamy. The persons whom it may hurt are 5.

- 1 Young men as leading them to an unsetled and floating carriage in manners.
- 2 It makes them easie to suitors, without respect of their choice.
- 3 Incontinent persons; it makes them unable to resist evill motions, though in the yeelding they grieve at it.
- 4 It debarreth their courage in punishing faults, and makes them loath to displease.
- 5 They which are rich, powerfull, kind-hearted, and have many helps to further others.

1 It makes the rich { Rash lenders.
Heady sureties.

- 1 Follow the riot of bad company.
- 2 Beare false witness for their acquaintance.
- 3 Soone take paines for others.
- 4 Joine them to unworthy men.

3 The powerfull have many suitors, and by it are made easie to yeeld to any demand, and prefer without election.

The way to barre it is to acquaint our selves with resistance to motions, denials of suits, if they be not honest, and convenient, but hurtfull to the granter.

The inhabitants of Asia were all slaves, because they could not pronounce this word. And Brutus said:

Impudence passes not feare of infamy.

The difference betwixt it and bashfulnesse is, that the bashfull retain a love of Vertue, the impudent doe not.

Peris, cui peris pudor.

Satis de pudore.

XVIII. Of Repentance.

Repentance is an act of conscience arising from the thought of an evill done.

What it is.

It is either { 1 Theological, because of offences done against the law of Grace.
2 Morall, because of things done against the law of nature, or common Honesty.

1 Repentance theologicall is in Christians alone.

2 Morall is in Heathens.

It is raised by three motives, { 1 Infamy.
2 Punishment.
3 Hate of vice.

1 That arising from feare of infamy, and punishment is slavish, and incident to the most.

2 The best repent for the hate of vice: For as they love good for the good, not for reward; so they hate evill for the evils sake, not for the punishment.

The parts of repentance are two { 1 Hate of the evill done.
2 Resolution of amendment.

It is descried three wayes { 1 By contrition of the heart.
2 By confession of the mouth.
3 By satisfaction by good workes.

Its properties are three.

1 Repentance must be with vehemency of griefe, least while our griefe for the

the fault slackens, our care for amendment slackens also.

2 It must not be for a time, but for continuance, sith evil is ever to bee hated, and good ever to be resolved upon.

3 It must not be deferred, lest delay breed custome of evill, and custome hardnesse of heart.

The stops of repentance are 7.

1 Shame to confesse our faults, or pride in not acknowledging them.

2 Delighting in our finnes.

3 Hope of long life.

4 Despaire of obtaining grace.

5 Presumption of Gods mercy.

6 Long custome of sinning.

7 Examples of bad men, which have long flourished, yet never repented.

The tenents of repentance are 5.

1 Repentance cannot be in a nature meere good, as God, nor meere bad, as the Devill; but in such onely as are partly good, and partly bad, as in men.

These are } Bad by nature; hence they offend.

2 } Good by grace; hence they amend.

2 It is onely in things that bee to fall: Beasts have it not: those actions are not voluntary, but necessary, which cannot be repented of.

3 It ariseth from a knowledge, and taste of sinne committed: thence children have it not.

4 It groundeth on hope: They that die desperate have it not, sith the desperate are swallowed up with griefe: The repentant receive griefe for the evill past, but joy for the future good, and future things move more then those past.

5 Repentance is joynd with shame, as impenitence is joynd with impudence.

XIX. Of Pitié.

Pity lookes outwardly to the evils of others, but by reflex to our owne.

It is mixed with } Griefe for the evils fallen.

Desire for their remedy.

1 Griefe of mind.

2 Torture of body.

Evils that raise pity are 4. } 3 Danger of others death.

4 Misfortune in goods.

The evils move most } 1 If they are so neere to fall, that we feare them.

2 If so lately fallen, that we freshly remember them.

3 If their then present falling barreth our expectance of contrary profit.

The ground of pity is our communion of nature.

The extent of it is a desire to helpe.

This desire hath } If we are able to helpe.

2. conditions, } If justice permit.

1 Grieving for such as lawes and justice will have banished, is womanish.

2 For those we are not able to remedy, it is fruitlesse.

The tenents of pity are 4.

1 The better nature, the more it is inclinable to it.

2 It is meanes to provoke charity.

3 It compares the evill fallen with the desert, and concludes the person unworthy to suffer it.

4 It brings us to acknowledge our owne misfortunes.

The parties most pitying are 3.

- 1 Old men partly { As not being so stomack full, as the young.
As having more experience of dangers.
- 2 Weaklings { Women } they thinke for their infirmity, they may soone
Children } suffer the like.
- 3 Schollers, as being by bookes acquainted with many examples of dangers.
- 4 They that have felt former evils, and now are rid of them.
- 5 They that have opinion of anothers worth, they count it below his deserts to be in evils.

The parties least pitying are 5.

- 1 Who are most given to { Anger. } they recount not the evils, that
Boldnesse. } may befall them.
- 2 Scoffers and they who are ready to wrong others.
- 3 They that are in extremity of distresse: As in Cities besieged, parents eat their owne children; whereas otherwise they used to pity them. Their care is for the remedy of their owne harmes, little for others: thence they that feare imminent dangers, pity not others, but care for themselves.
- 4 They that are in height of fortune not likely to fall. Thence tyrants and rich men pity least.
- 5 They that have prejudice against others behaviour, what befalls them, they count it desert, and doe lesse grieve at it.

The persons whom we pity most, are 4.

- 1 Acquaintance rather then strangers.
1 Yeares.
2 Manners.
3 Profession.
4 Office.
5 Stocke.
- 2 Our equals either in
- 3 They who suffer those evils, which we our selves feared.
- 4 Men bearing their { 1 Patience } by it we count them unworthy of them,
harmes with { 2 Courage } and so pity them.

The way to raise pity for others.

- 1 Shew the valour, and the worth of the person that suffers.
- 2 The grievousnesse of the evils befallen.
- 3 The like may happen either to them, or their friends.
Conscience of a mans owne case moves it.

XX. *Of Zeale and Iealousie.*

- 1 **Z**eale is a Passion grounded on love.
It is mixt with { 1 Griefe for a fault committed.
2 Desire for a good intended.
It borders on repentance, and is the issue and effect of it.
It is ever with fervency: It is most dangerous, unlesse it bee regulated with knowledge.
It is either for a { Good quality.
The good of a person.
1 The former is in the best, who are zealous of good for goodnesse it selfe.
2 The latter comes from the respect of a person conceived in the behalfe of one we love.
It supposeth { Wrong done to our friend } or griefe for it.
Desire of remedy }
2 Iealousie is a passion conceiting an evill in another, that perhaps is guiltlesse of it: it comes onely by conjectures.
It proves often injurious

It

It breeds trouble in our selves, and distrust to our friends.
The way to barre it is; not to skanne the actions of others, but with a favourable interpretation.

XXI. Of Anger.

Anger is a compound of sundry passions: As 1. Pleasure in revenge.
2. Griefe in recounting the wrongs. 3. Insolence in overbearing.
4. Envy in repining at the welfare of others: The proper Act of it is desire of hurting.

The Tenents of it are 5.

- 1 A just iniury requires as just anger: and it is stupidity not to beemoved with it.
- 2 It is not bent against men in generall, but to some in speciall onely. Thence Titon is not said to be angry with all but hare all.
- 3 No passion is more indiscreet then it: thence it is ridiculous, and to be contemned, none more violent, thence terrible, and to be feared.
- 4 Being moderate it whets Valour; but over-earnest it weakens revenge.
- 5 To bee suddainly moved is a signe of weaknesse: hence it agrees more to the sicke, then the sound, to old folkes then to young; and to Women.

Quippe minuti

*Semper & infirmi est animi exiguae voluptas
Vtuo continuo: sic collige, Quod vindicta
Nemo magis gaudet quam femina.*

Adjuncts of anger are these, viz. 1 Vexation of minde.
2 Ignorance of his owne strength.
3 Undecency of gesture.
4 Wrongfull opinion of others.

The causes raising it are. Generall.
Speciall.

- | | | | | | | |
|--|---|-----------------------------------|------------|----------|--------------|--------------|
| 1 The generall disrespect shewed 4- wayes. | 2 The speciall are according to the nature of speciall persons. | 1 By derision in words. | 1 Friends. | 1 Blood. | | |
| | | 2 Injury in deeds, as against, | | | 2 Inferiours | 2 Authority. |
| | | 3 Ingratitude for good turnes. | | | 3 either in | 3 Wealth. |
| | | 4 Want of due observance from our | | | 4 Vertue. | |

1 If wee have too settled a persuasion of those wee converse with: if they faile in the contrary to our expectation, our choler riseth: Hence credulity inflames anger.

2 Curiosity inflames it, if we busie our selves too much in love, and frivolous matters: Crosses in either of them fret us.

3 If wee delight in one thing more then another, when we should use either with indifferency: As in an household, if our stuffe of this fashion like as better then that, and we take pleasure in it, the losse or the mislaying of it frets us.

The wayes to allay anger in others.

- 1 Prove the wrong done upon Ignorance.
Constraint.
Suddaine passion.
Mischance.
- 2 That it was done to our owne harme, as well as his.
- 3 Shew sorrow for it, for outfacing growes of impudency, that of disrespect, the nurse of anger.

Be not aspoone in talke:
Dissemble our hostility; and feare: the angered by this are lesse prone to re-venge.

6 Seeme to bee serious for his good, and overcome this wrong with other passages of kindnesse.

7 Speake not against men of his sort and quality though their persons grieve him not.

8 Scoffe at none whatsoever, but be affable to all. *Isocrates ad Damon.*

To beare anger in our selves the wayes are 4.

1 Use no heart grieve, but { Sports } Yet barre insolent delights, fith
Games } these are overbearing, and an-
Mickments } ger others.

2 Resolve to resist choler by not easily accepting disrespects.

3 A suddaine feare, or grieve unexpected allayeth ones anger.

4 If a wrong bee offered, rather contemne the offerer as wanting wit, then thinke our selves disgraced by it.

How to behave our selves in anger. 3.

1 Bend our selves to a contrary passion; as *Socrates* with his friend laboured to look upon pleasantly on him.

2 Retire we our selves from Company till the passion hath spent it selfe.

3 Not to revenge before our anger be past.

Persons most given to anger are 4.

1 Weaklings, as children, women, sicke men, old folkes.

2 They, that are ambitious, and standing for offices.

3 They, that require much awe and reverence of others.

4 They, that know their defects well, yet are scorned.

The parties, with whom we are least angry.

1 They, who reverence us, which argues they doe not disrespekt us.

2 We cannot be angry with him, whom we feare; fith anger implies hope of revenge: feare not us.

3 Men doing things upon choler, lesse anger us.

4 Anger cannot be against those, whom we cannot hurt, as gods, and kings, that are out of our reach.

Satis de Ira.

XXII. of Maligning.

This Passion hath 2. parts, 1 Envy, grieving at anothers good.
2 *Emulation*, jaying for anothers evill.

1 It is in the worst natures, and is opposite to common society.

It is principally betwixt equals, as men of the same sort: hence wee envy not those, that are in eminency above us: A common Souldier never envies *Alexander*; one of his neerest Captaines may.

3 It aimeth especially at the goods of { Honour }
Fortune.

4 It eates up a mans heart by fretting at others.

5 It ariseth from pride of our owne deserts.

The way to avoid it in our selves is to thinke that there must not bee an equality of gifts and goods in all: that as men are diverse, so they must have distinction of place; and if any excell, we ought not to repine.

Great men avoid the envy of others 3. wayes.

1 Let them shew themselves gentle, and affable to all.

2 Imploy their goods to the uses of others.

D

3 They

3 They must not thinke to bee singular in any thing, such that is envious.
Nemo de vobis immo excelsus; This is the Law of the *Ephesians*, who therefore
 banished *Hermadornus*.

XXIII. The efficient cause of Vertue.

Vertue is affected by 3 things; 1. Nature. 2. Precept. 3. Practise.
 Nature begins the inclination; Precept directs it; Practise perfecteth it.
 Nature workes vertue in Soule only
 either from the 1. Temperance of the body.
 In Soule are 2. parts, 1. Understanding. 2. Will.
 The understanding 1. Speculative, working for contemplation; The issue
 is either, *viz.* 2. Practicke, working for action; The issue of it is
 Honesty, or morall Vertue.
 1. The acts proper to the practicke Understanding are 2.
 1. Good. 2. Evil.
 These judge things to be 1. For affecting it, if it be good.
 Then the Will records them, 2. For avoiding it, if it be evill.

Of Practicke Understanding.
 As the speculative is the discoverer of truth from falsehood: So the practicke
 of good from evill: Both judge from principles, and undoubted opinions:
 The practicke judges onely of morall principles arising out of the law of na-
 ture: Grounds, that *philosophers* assent unto in the generall; though they will
 not follow them in particular.

The principles of these are.

- 1 Honour God.
 - 2 Love honesty.
 - 3 Obey { Parents.
Magistrates.
 - 4 Love our Countrey.
 - 5 Hurt no man, but doe as you would be done by.
 - 6 Yeeld every man his owne.
 - 7 Use all sociably, and in friendship; { Credit.
as farre as stands with our { Benefit.
 - 8 Execute common malefactours. for the common quietes sake.
 - 9 Suffer distinction of Lordships, lands, bounds, mens private possessions, &c.
- These ruler all nations assent unto, and from these institute their Common-
 weales, *Ius gentium*. The breach of these is accusable by nature, and this accusa-
 tion is termed Conscience.

XXIV. Of Conscience.

Conscience is the immediate act of our soule, arising from a naturall appre-
 henstion of good, and avoidance of evill.
 It cannot be totally extinguished in any.

It brings us } To know our faults.
 } To condemne them.
 } To have will to prosecute the contrary.

It is either of } faults past; so it } Chetiv.
 } faults future; so it } Condemnes.

It is best in the meane, and most } Large.
 } dangerous, when it is too } Nice.

1 The former calls evill good, and breeds presumption.
 2 The latter countes of the best good as evill, and breeds despaire.

It grounds upon this Syllogisme.
 No evill is to be committed:
 This particular is evill.
 Ergo: Not to be committed.

The Major is drawn from the practick understanding out of the rules of Nature. The Minor ariseth from view of particulars, which are variable, and may often deceive; if our apprehension of them be false, our Conscience must needs erre.

Error of conscience proceeds from these heads.

- 1 From ignorance, if we know } Chosen.
 not what is to be } Refused.
- 2 Negligence in not fitting our selves, and getting direction from others, if we finde our owne weaker.
- 3 Pride in not humbling our conceits } Wiser
 to others, that are } Honester } then us.
- 4 Singularity in following our owne private spirit.
- 5 Passion, that inclines Conscience to follow appetite.
Perit omnis iudicium, cum vos vincit affectum.
- 6 Pusillanimity in distrusting all things, and fearing to venture on any thing, lest we offend: If we doe any thing against conscience, bee it good or bad; the act utterly is sinfull.

XXV. Of Consultation.

- Consultation is grounded on these rules.
- 1 It is not touching the End, but of the meanes directing to it.
 - 2 Things past are not to be consulted of, but things future.
 - 3 Not necessary things, but contingent.
 - 4 Things nothing appertaining to us are not to be consulted of.
- Our consultation is either } By our selves alone.
 } By others.
- 1 Wee consult with our selves } Of a great lecture.
 if the matter be } 2 Suddainly befallen.
 } If we have not a friend to impart it.
- 2 To consult with others } Honer.
 observe them to be } Wife.
 } Faithfull.
- The question in our consultation is,
- 1 Whether the thing be convenient for vs.
 - 2 Whether possibly to be compassed.
- 1 Safe for us, not discommodious, } Prudence.
 } Not against the 4 } Justice.
 rules of Honesty. } Temperance.
 } Fortitude.
- 1 Possibility

2 Possibility of compassing it found out from view of all these meanes, wee must use in working that end.

The particular wayes of Consultation are.

- 1 Whether the things be profitable, or disprofitable.
- 2 Whether honest, or dishonest.
- 3 When 2. profits are proposed, we question, which is greatest.
- 4 If 2. things be honest, which is most honest.
- 5 When one part is onely honest, the other onely profitable, which is rather to be procured.

In Morality, the least honesty counterwailes the most profit and isto be preferred before it : In Politicks our persuasion must be according to the auditory, with whom we deliberate.

Before the Vulgar our consultation must bee most inclining to profit, fith they are most addicted that way ; before the better sort stand rather for honesty and honour.

XXVI. Of Prudence.

Prudence is a speciall quality of a Moralist, being the sole directresse, and governesse of all his actions.

It is onely in things ambiguous, and borders on Consultation.

It consists in { Choice.
Judgement.
Finesse of application.

It long consulteth, and quickly executeth.

It corrects things past, directs the present, foresees the future.

The speciall rule of it, is silence in revealing our purpose.

The waies to get it are.

- 1 Industry in { Disputing } matters practicke.
Reading
- 2 Observations of mens carriages.
- 3 Noting what effects proceed out of what causes.
- 4 Acquaintance with sundry Positive lawes, especially of our owne land.
- 5 Using to invent much of our owne, not to stand strictly on authority of others.

The parts requisite to prudence are:

- 1 Memory for retaining experiences past.
- 2 Understanding for judging morall principles.

This gotten by { Hearing.
Inventing our selves.

3 That wee may bee ready to heare is required docility, or readinesse to leame.

4 For invention is required, *Salernia*, a ripenesse of finding out meanes.

5 When we have { Learned, } we must confer one thing with another,
Experienced, } and discourse of the convenience of it.
Invented, } Hence to prudence is required reasoning.

Ratio

6 Out of this discourse arise precepts for action.

These observe 3. things.

- 1 Direction for fit meanes to fit Ends. Hence is required Providence.
- 2 Weighing each circumstance of the businesse ; Hence circumspection is required.
- 3 Avoiding all stops and impediments : Hence is required caution for evill.

XXVII. of the Will.

THe seat of the Will is, the Heart, where Passions reside: As the brain is the seat of the Understanding.

The will prosecutes what the understanding judges.

The object of it is Good: Of the understanding Truth.

Will without passion chooseth the true good: with passion the forged and apparent onely.

If goods bee evident, it affects simply without pause; if doubted, there is first deliberation.

It hath 2. parts, *viz.* { 1. Approbation, or willing.
2. Refusal, or nilling.

For execution it commands { Passions.
in men { Faculty of motions.

1 The former it rules by perswasion, as by an Aristocracy, or state regiment whereby government is not so absolute, but the rest may interpose.

2 The latter it rules by command, as a Lord over his servant, without relent in the one, or reluctance in the other.

The tenents of the Will are 2.

1 It affects nothing but what the understanding hath weighed first: and contrarily the understanding conceits nothing, but the will perswades; their offices are joint and mutuall.

2 It cannot be constrained being of greatest freedome and liberty: Though wee have not freedome of will, to come from worse to better, in matters of grace, yet in matters civill wee have, sith it comes from a common notion of goodnesse conceived by the practick understanding.

XXVIII. The formal causes of Vertue.

TO examine this we enquire what is the { 1. Nature.
2. Properties.
3. Sevrall kindes of Vertues.

1 Its nature is to moderate the passionate part of the Soule: It is termed by *Plutarch*, A disposition of the understanding part, according to reason.

This reason either 1 Rules the passionate part, so termed vertue.
2 Yields unto it, so it nurces up vice.

Aristotle defines it thus:

1 It is not connaturall, but bred by custome, thence termed Habit.

2 Of habits some { 1 Inforceive as the understanding, that compels us to assent unto an evident truth.

2 On choice, and praelection, and such a one Vertue is.

3 Praelection and choice may be of things utterly nought; as when 2 evils stand compared, and in competition: but the choice of vertue must rely on the meane for his Center; whereas evils spread to the extreames, and multiply degrees: Goodnesse acknowledges one onely point of perfection, The golden mediocrity.

Mediocrity changes according { 1 Time.
to circumstance of { 2 Place.
3 Person. } If it were set, and definitive one.

It were vertue for all to use it alike, but the begger may not be liberall of his purse, though a King may; And *Milo* the wraistler may eat large meales, when the

Defin. Habitus.

Praelectivus.

In medio consisten.

the weakling taking the same proportion may be termed riotous: The spittle of a man to a man is wholesome, but to a Serpent death: and what is virtuous to one, may prove a vice to another. This mediocrity is to be ruled by judgement of each circumstance, which prudence must prescribe.

Directions how we shall attaine the meane.

- 1 Of the 2. extreames see which is most opposite to vertue, and avoid it.
- 2 Sift out the vice, our nature is most prone to; and labour to avoid it, by taking the other extreame: As a man being given to be prodigall let him labour to bee covetous. *Ab extremo ad extremum non pervenitur nisi per medium.* So wee straighten sticks by bending them as much the contrary way, as they are bent the other way.
- 3 Resolve to resist bodily pleasures, and embrace them of the minde.
 2. The properties, and notes of vertue.
- 1 No morall vertue, but is placed betweene two vices.
 - 1 The excesse to be depressed.
 - 2 Defect to be raised.
- 2 Its ever in action, and the action must be with 3. conditions.
 - 1 Knowledge. *Scienter.*
 - 2 Perseverance. *Constanter.*
 - 3 Willingnesse. *Volenter.*
- 3 Delight in goodnesse is a signe of the vertue gotten. Sorrow argues, we doe it unwillingly.
- 4 Vertue is conversant especially about the moderating of
 - 1 Griefs.
 - 2 Pleasure.
 sith these are the grounds and ends of all the rest.
- 5 It is exercised about the highest, and hardest employments.
- 6 It is amiable to all men, even to strangers and enemies.
- The grounds of vertue are 3.
 - 1 Religion towards God.
 - 2 Charity to our neighbours.
 - 3 Cherishing our selves according to reason.
- The comprehension of all vertue is universall } God.
 justice: by it we yeeld our duty to } Neighbours.
 } Our selves.

XXIX. The severall kindes of Vertues.

- Vertues are
 - 1 Common to all.
 - 2 either } Speciall to some person.
- 1 The common are requisite to all, though perhaps few have them.
 - They are either
 - 1 Proper, or full vertues.
 - 2 Improper, or halfe vertues.
 - 1 Full vertues are directed either,
 - 1 To our private good onely.
 - 2 To the good of others.
 - 1 Our private good is gotten by the governance of 2. passions,
 - 1 Desire.
 - 2 Feare.
 - 1 Our desire is of things
 - 1 Naturall.
 - 2 Adventitious.
 - 1 Naturall
 - 1 Of nourishment: The vertue that tempers this is Sobriety.
 - 2 Of vengery: The vertue that allaijes this is Chastity.
 - The conjoyning of both is called Temperance.
 - 2 Goods adventitious, as of
 - 1 Wealth; the vertue for this, is content.
 - 2 Honour; the vertue for this, modestie, or a decent competition, of what we deserve.
 - 2 Our feare is allaijed by Fortitude.
 2. Vertues directed to the good of others are:
 - 1 Justice

- 1 Justice of { Exchange. Distribution.
- 2 Bestowing of gifts for the { Great ones, termed Magnificence. Smaller sort, Liberality.
- 3 Courtesie, and pleasantnesse of conversation.
- 2 The halfe and imperfect vertues are { 1 Veracitie, or a habit of telling truth, 2 Grace of carriage, 3 Emulation, 4 Continnence, 5 Patience.
- 2 The vertue speciall to some persons is the Heroicall spirit, which cannot be incident to all, but onely to the highest, and best perfections.

XXX. Of Temperance.

- This containes { 1 Sobriety, 2 Meats, 3 both these, 4 Properties. 5 touching, 6 Drinks, 7 have their, 8 Effects.
- 1 Chastity, tamer of lusts.
- The properties of Temperance.
- 1 With moderation to desire absent delights, and to use them present honestly.
 - 2 To affect onely such as are lawfull, and honest.
 - 3 For attaining, or injoying them to doe nothing, that may prejudice { 1 Health, 2 Credit, 3 Private estate.

- The effects of Temperance { 1 Soundnesse of body, 2 Strength of understanding, 3 Promptnesse of both, acquiring and exercising all other vertues.
- Excesse. Meane. Defect.

Intemperance, that unbri-
dles our appetites, and gives
the onset to all kind of vice.

Temperance, { Stupidity, the utter refusal of
all naturall necessary delights; a
fault so seldom, that the Ancients
could invent no name for it.

Aut Deus est, aut Truncus iners, qui nescit amare.

- Excesse. Sobriety. Defect.
- In { Meates, gluttony. Overmuch abstinence { Meats.
Drinks, drunkennesse. { Meane. { from necessary { Drinks.

Castitas { 1 Calibatus,
2 Canjugii.

Of Chastity.

Chastity is the containing of bodily lusts to the unmarried; moderating of them to the married.

It is in { Mind.
Body.

The breach of it is not from the act onely, but from the thought and affecti-
on of defiling.

The Integrity of mind and body is termed Virginity, the queene of Vertues.
If wee abstaine in body but with reluctance of mind, it is termed Containing.
A vertue Civill, sith law cannot take hold of us, but not full Morall.

- Excesse. Meane. Defect.
- Unchastity in { 1 Words. 2 Defrauding our bodies of plea-
3 Gesture. 3 sures lawfull: This is vicious.
4 Actions. 4 Chastity. 4 In none, but the married, which
4 Thoughts. 4 must not defraud one another.

It

It effecteth 3. things. } 1 Diseases to the body.
 } 2 Deformities.
 } 3 Corruption to the mind.

XXXI. Of Content.

This Vertue moderates the desire of wealth.

There are 2. } 1 A gratefull acceptance of our present estate.
 parts of it } 2 Barring desires of more, then befits our use.

The properties of it are 5.

- 1 It breeds quietnesse, and tranquillity of mind.
- 2 It cannot be incident to fooler and ambitious men.
- 3 It is a token of a good nature, and wise discretion to know sufficiency.
- 4 It is the truest riches; whereas the injoying of the greatest possessions with desire to get more, is the truest poverty.
- 5 It ventures not wealth in rash mispending, but keepes what is gotten without feare, till occasion, and use force him to spend.

Excesse.

Meane.

Defect.

Covetousnesse, whose effects

Neglect of our state temporall.

1 A desire of gain.

The effects hereof are 2.

2 It perswades us to all vice for the attaining it.

1 Idleness in our vocation.

2 Extremity of want.

XXXII. Modesty, and Magnanimity.

Both these are conversant about honour: The ground of them is desert.

Their properties 3.

- 1 To sue for honour deserved
- 2 To accept it offered.
- 3 To stand for his place, when his honour is deservedly yeilded to him.

Their difference.

Modesty is of lower, and lesse honour, as our desert is lower, and of lesse things.

Magnanimity is for the most generous heart, to desire the best, as his vertue is in supereminency above others.

Modesty hath these rules.

- 1 It argues, that both our selves and others have fit approbation of our vertue.
- 2 It is resolute against carpers, and wrongfull imputers.
- 3 It is humble in not acquiring further, then shall benefit us.
- 4 It shewes it selfe in } Words, } either for the } Wishing what we deserve.
 } Gestures. } Refusal of what we deserve not.

Excesse.

Meane.

Defect.

Ambition hatched

by presumption.

Modesty.

Over-servilenesse called *apomula*. It ariseth from ignorance of our owne worth, not daring to shew our selves in the world.

XXXIII. of

Magnanimity is for the highest perfection. It aims at the best honour, to (whereas Honour is the repute of the multitude) the perfection of it is greatest, when that repute is most transcendent and generall. Thence the person truly magnanimous must have the whole fardle of vertues; that hee may benefit all, that speake well of him, and hurt none to avoid Ignominy.

The Rules are 8.

- 1 The person having it countreth his honour received due unto him both for others good, and his owne desert.
- 2 He cares not for common censures.
- 3 He rather gives then takes rewards.
- 4 He remembers not injuries.
- 5 He is pliable to all sorts of persons, with satisfaction to them, and credit to himselfe.
- 6 He admires not others { Words, } fith he him- { Pleasure } is able to doe
 { Deeds, } selfe on { Occasion } the like.
- 7 He is sparing in censuring others, yet living.
- 8 He puts not himselfe upon voluntary dangers, yet undergoes the utmost, if it be put on him.

| | | |
|------------|--------------|--|
| Excessive. | Mean. | Defect. |
| Pride. | Magnanimity. | Puſillanimity, or unſit dejection called |

Pride is in {
1. Vaunting our owne parts.
2. Suffering others to attribute more to us then we deserve.
It ariseth from philyarty.

It betrayes it selfe in { Words.
 { Gesture.
 { Apparell.

It hath these tenants. 5.

- 1 A proud man admireth none but himselfe.
2 The way to abate him is to let him know, that we scorne him.
3 He is unjust, as attributing all to himselfe, and derogating from others.
4 It is most inclining, and most dangerous in falling.
5 It is hatefull in all, but detestable in poore folke.

Puſillanimity doth undervalue our worth.

The rules of it are 4.

- 1 It is ingratitude towards God to receive gifts, and by our reservedness to
- 2 lessen them.
- 3 It makes other jealous of our parts, when we our selves distrust them.
- 4 It is the mother of idleness.
- 5 It defrauds other, that may get by us.

The Passions that exercise
this vertue are {
1 Care to be raised.
2 Boldnesse to be repressed.
It is the indurance of euill for {
Honour } sake.
Honesty }

Evils

Evils are { Internall from our selves, as vices.
Externall, as dangers falling from without us.

1 The internall the most valiant ought to dread: his feare must be to nothing but sinne.

The externall are { 1 Extraordinary as { Prodigies.
2 Strange { Lightnings, Thunders, &c. } from
3 Ordinary, and befalling in common. } God.
The former none contemne, but { Atheists.
Fooles.
Madmen.

2 The valiant mans vertue is onely in contemning the latter.

1 General to all, as, Death &c.

2 Evils ordinary are { 1 Especiall to some as, { Exile.
Diseases.
Misfortune.

Death is the principall object of Fortitude, sith its the most terrible of all other evils.

1 As barring us from the exercise of all morall vertues: the upthor of all goods.

2 As bereaving us of all temporall commodities, the objects of our delights in this world.

All death is not properly the object of Fortitude, but the most honourable, as dying in warre.

1 Sith it is with highest honour.

2 With most good to the publicke wealth.

The effects of Fortitude are 3.

1 To triumph over our enemies.

2 To keepe our owne state quiet from the wrong of others.

3 To assure us in extremities.

Ant cita mors venit, ant victoria laeta.

The incourages of this vertue are 5.

1 Words of cheering from the honourable, and wiser sort.

2 Examples of others shewing their words by their deeds.

3 Exercise in skirmish.

4 Hope of reward, if not of spoile, yet of glory.

5 The enemies weaknesse, and unprovision.

The Tenents of Fortitude are 3.

1 They must bee honourably undertaken, not on suddaine Passion, or resolution.

2 They must be in shew, that they may be commended by the weale publicke.

3 They must not bee for private respects, but for publicke.

2 The valourous must not be stockish but have some feeling of wounds, yet voluntary he endures them for his ends sake.

3 It is not lawfull for him to kill himselfe, sith hee doth it for avoidance of further evill, which is cowardize, *nam*

Timidis est optare necem, Ovid. metam.

Five sorts of men seeme to have Fortitude, yet have not.

1 They that undergoe { on hope of reward,
dangers onely { for feare of punishment. } As pressed Souldiers.

2 They that warre onely, because they have had experience in the warre, and cannot shew their skill otherwise.

3 They that run to skirmish in hot blood.

4 They that overcome often, and for hope of like successe venture more.

5 They

They that weigh not the extent of the danger, they are **foolish** & **rash**.
 Excesse. **Meane** **Fortitude** **Cowardize**. This grounds
 Rashnesse of venturing. This grounds most on the passion of feare.
 grounds most on the passion of boldnesse.

XXXV. of Justice.

Justice is the mother, and fountaine of other Vertues: It is in every con-
 dition of state, **Publicke** & **Private**.
 It is grounded in proportion and valuing.

It is either **Universal**, comprehending all Vertues.
 or **Particular** for some **States** **Person**.
 especiall

1. **Universal** Discretion to yeeld each his due.
 2. **parts** **Obedience to the Law**.

The lawes are either **Written** **Unwritten**.
 The written are the positive lawes **Law of Nature**
 of the land, grounded on the **Customes of places**.

And they are **Publicke** & **Private**.
Publicke **Private**
Endited by the whole state, as Statutes.

1. **Publicke** **Proceeding from the King alone, as Edicts and**
Proclamations.

2. **Private** is for speciall contract, as Leases, Bonds, Deeds, and all which have
 force of law.

3. The not-written is the law of **Nature** & **Nations**.

The precepts of this Justice are, **viz.** 1. Live honestly.
 2. Wrong none.
 3. Yeeld every man his right.

2. **Particular Justice** is **Distributive** designing **Office** **Rewards** **Punishments** according to
 to each man **desert**.

2. **Commulative** in matter of exchange, and bargain
 betweene man and man.

The breach of the **Former** is favour, an acceptance of persons,
Latter deceipt.

Four things prevent both **1. Favour to the person** **2. Feare to displease great ones**
 kinds of Justice. **3. Rancor, and malice.**

Justice of distribution con- **Reward for the person deserving.**
 siders 2. things: **Punishment for the person offending.**

The objects of it are either **Honour** **to the good.**
Chastening to the bad.

Its Tenet is. **It is not positive but varies according to the quality of the person: As in**
any Army all must have their pay, but the Capitaine more then the common
Souldier:

Souldier: And it were injustice to make them equall in reward, that are unequal in desert. The like in punishments.

Excesse. Meane. Defect.
Injustice in dispensing to us above our desert. } Justice. } Injustice in yielding us lesse then our desert.

Both are termed Injury.

The excesse is injury to others, and robbing them of their due, and bestowing on us that deserve it not.

The defect is injury to our selves, sith others can have, and we not.

The Rule of injury is:

That it is suffered still with repining and unwillingnesse: thence a man cannot doe himselfe injury, sith as he receives the wrong, hee is repining, and as he offers it, hee is voluntary: And wee cannot will and nill at one time the same thing.

Justice of Exchange respecteth not the quality of the person but the worth of the thing: It is principally in buying and selling, and in all matters of contract.

This differs from the other, for this goes upon quality (so much for so much) that not: They are in trades, this in Merchandize, the meane is money.

In ancient time they used to give wares for wares: afterwards they gave Metals by weight for them. Now for more convenience of portage they have invented money, to wit, Metall in stampe and by it they exchange commodities.

The extreame in generall is unjust exchange.

Excesse.

Meane.

Defect.

When we sell for more } Justice commutative. } When wee sell for lesse then its worth. } then it is worth.

In the former wee wrong the buyer, and it is the greater fault: In the latter wee wrong our selves, and it is more tolerable, sith our selves are the cause of it.

The meane rule for this injustice is.

Hee is more in fault, that doth the wrong, then hee that takes it, It was Socrates his saying, *Ant. Gell. Noct. Att. l. 2. c. 9.*

XXXVI. Of Liberality, and Magnificence.

The act of this Vertue is relieving others wants, without prejudice to our owne.

Their difference is } Liberality is for lesse gifts. }
Magnificence is for greater.

The object of both is money, or money-worth.

Liberality is of lower abilities.

In it are considered 1. conditions. } End } of giving.
Manner }

The end onely is to benefit others in honest sort.

They that give } To receive } Like } profit }
Greater } are not counted li-
Upon ostentation: } berall.
On long importuning and suit: }

Who the } Giver } is
Receiver }

The manner of giving is 1. The time that the gift ought to come:

bounded by circumstances; 2. The place where,

3. The quality of it.

4. The quantity of it.

- 1 The Person must be } Free-hearted to any.
Wise & bestow on the worthiest.
 - 2 Though the receiver be laid, yet, if hee be in poverty, his poverty makes him worthy of reliefe.
 - 2 The time must be without pause. *Be dat, qui cito dat.*
If wee give onely for honesty sake, take a publicke place, that others may witness it; such fame is the trumpet of Vertue.
 - 3 The place must be } considered of }
2. and if for poverty and almes blow no trumpet; a place of most privacy makes the gift most acceptable, *Vbi-
cunque est homo ibi beneficio locus est. Seneca.*
 - 4 The quality must be such, that it be not to the hurt of the receiver: it must rather be for profit, then for pleasure.
 - 5 The quantity with moderation } Too much, }
betweene either, } Too little, }
- drawn from consideration of the want of the receiver, present use of the giver, that by giving he not disfigureth himselfe for his owne employments.
- | | | |
|--|-------------|--|
| Excesse. | Meane. | Defect. |
| Prodigality in wasting a mans private estate. | Liberality. | Avarice, or Niggardize: this is wil- ling to receive all, give nothing. |
- Avarice is worse then Prodigality.
- 1 It is further removed from liberality, whose act is in giving, such the nig-
gard gives nothing, and the prodigall gives too much.
 - 2 The niggard defraudes both himselfe and others: The prodigall harmes
himselfe onely, and benefits others.
- Magnificence is a Vertue onely for great ones.
- | | |
|--|------------|
| The Magnificent must be high above others in | 1. Blood. |
| | 2. Office. |
| | 3. Vertue. |
- | | | |
|------------------------|--------|--|
| Excesse. | Meane. | Defect. |
| Riotous mispending. | | Sordid parsimony; fearing to spend when |
| End of it ostentation. | | Honour } Necessity } require. |
- | | | | |
|-----------|--------------------------------------|---------------|----------------------------------|
| The Cause | 1. Folly. | Magnificence. | Honour } Necessity } require. |
| | 2. Neglect of our private estate. | | |

XXXVII. Of Courtiesie and Urbanity.

- T**His Vertue shewes it selfe in } Serious }
Sporting } Conversation.
- The Act of it is pleasure, and pliability of behaviour.
- The end of it to } Please others.
Demerit their good opinion.
- It hath 2. parts, } easinesse of access.
Slownesse to take offence.
- The sterne to guide it is Gravity, least our affability turne to lightnesse.
- It was said of Cato Major: *Erat in illo viro comitata condita gravitas.*
- The rules of it are 3.
- 1 It is most honourable in high persons.
 - 2 It is varied according to } Time.
Place.
Person.
 - 3 It intends our } Owne honestie.
Anothers profit.

For courtesie in serious matters the extreames are:

| Excesse. | Meane. | Defect. |
|---------------------------------|-----------|--|
| 1. Popularity in great ones. | Comitie. | Morosity, as seeking neither to please any in honest causes, nor be displeased by any. |
| 2. Soothing in the lower ranke. | Taking | jefts: |
| Affability in sports is called | Giving | |
| Urbanity for | | |
| Excesse. | Meane. | Defect. |
| Scuttrility for abuse | Urbanity. | Rusticity, making not able to give, nor willing to take jefts. |

XXXVIII. Of Grace of Carriage.

This Vertue makes not a man } Reall for honesty.
But complementall.

Its rules are } General } for fashion.
Special }

1. General. 7.

1. Goe cleanly in apparrell.

2. Keepe our body from loathsomnesse.

3. Have a fit compofure of } Gesture, specially for } Head.
Gare, and all without affectation, and nicenesse.

4. Have convenience of } Fitnesse of words.
speech for } Discretion of reply.
Moderation of sound; } Over-loud.
that it be not } Affected.
Harsh.

5. Have insolent } Gesture.
Shricket in laughter: let not that bee often, but as occasion is offered; and that not so much apprehended by us, as the company also.

6. Use due reverence to our betters, observance to strangers, pleasure to our Acquaintance, Courtesie to our inferiours.

7. Take meat and drinke mannerly.

Speciall rules are had from consideration of each } Person.
Degree.
Quality.

Persons differ in } 1. Sexe.
2. Years.
3. Manners.
4. Fortune.

Towards all our carriage must be honest and pleasing.

1. Honest pleasure is made by } Speech.
Gesture.

1. Twixt difference of sexe this behaviour } Little speakers:
is requisite: women must be } Not forward for action.
Men must take up the talke.

Their talke must be serious of } Learning.
Not things sorrowfull, but of mirth, and obvious passages.

Their gesture is learned by dancing.

- 2 Difference of yeares is either in, /c. { Youth.
Middle-Age.
Old-Age.
- Wayes to be gracefull with young.
- 1 They are soone angry : { Word, } to raise passion in them.
Crosse them not in { Deed, }
- 2 Enquire not of his faults : If a friend, tell him in private ; if a stranger, he scorneth thy rebuke.
- 3 Tell them of good hopes, and great adventures. Young men are credulous and confident : and if you perswade them to the hope of a good, they will love you for it.
- 4 Our speech must rather be of pleasure, then profit.
- 5 Be merry and jesting, and seeme to like of their company.
- 3 To be gracefull with old men 5. wayes.
- 1 Bee not resolute in Tenets discoursing with them : they are soone tefty, if they bee crost, and love rather a young man doubtfull in controversies, then over-holding ; sith they know the hardnesse of finding out a truth, and the earnestnesse of youth in holding a possible falshood.
- 2 They are suspitious, we may not grow in too fast with them, or force into their company.
- 3 Our speech must rather be of profit, then honesty, since they are generally covetous.
- 4 Shew reverence to age, not for fashion, but as spying some sparks of authority in their persons.
- 5 They are talkative, feed them with speech, but rather second them in their conceits, then to sift them from contradictions, take heed of often replies, they must rather be forced by question, then they proceed voluntarily.
- To aske them questions, save onely of things necessary, and pertaining to themselves is against good manners.
- The middle aged keepe an indifferent { Young.
Old.
- tenour betwixt both
- Our way to be gracefull with them is to { Honesty, which likes
keepe the middle straine for { young men.
Profit, which likes
old men.
- Difference of manners is scene according to the difference of passions, and the way to behave our selves in such a case is from the observance of his { Passion. } which have beene formerly described.
Age. }
- * Difference of fortune is scene in { Nobility of birth.
Height of office.
Riches.
- Our behaviour to { Yeelding in word, } This is most honest for us.
these must be { Submission in body, } Pleasing for them.
Assigning titles,

XXXIX. *Of Emulation.*

Æ Mulation stirs us up to Vertue, and heartens us to Imitation.
The object of it is a good quality in others, and attainable by us.
It is with griefe, that others have out-strippt us, and with hope of over-taking them.

It differs from Envy, sith that is in the worst, this in the best natures : Li-

curtus in *Spuria*, commended it to youth, naming it the nurse of Vertues.

In it selfe it is profitable, } Hate.
but in excesse raises } Envy.

The parties most given to it are,

1 Young men, sith they are ever in rising.

2 They, who have equality of } Trades.
} Professions.
} Abilities.

As the *Roman* emulates the Souldier, the *Athenian* the Scholler, the *Carthaginian* the Merchant, &c.

3 They, who count themselves of worth, and hope to attaine to as much perfection as another.

Excesse.

Meane.

Defect.

Indignation for an-
others rising.

Emulation.

Abjection of mind, as not weighing,
whether we be out-strip or no.

XLI. Of Continency.

This is conversant about } Desires } especially of } Nourishment.
the restraint of } Pleasures } } Venery.

The difference betweene a continent and temperate man is: The temperate hath his passion of desire subdued within: The continent not without, soile and reluctance; passion dwelling within like a dangerous Citizen; though stopt from rising, yet ever feared.

Hence Continency is not properly a vertue, sith passion is not brought to consent with reason: And Incontinence is not properly a Vice, sith it doth that fact, but in judgement condemnes it.

The Intemperate doth it, } Will is corrupted.

and approves it, sith his } judgement is blinded.

The opposite of Continence is Incontinence:

The Incontinent before the act hath knowledge of what is right and fit to be done: in the act hee is carried by Passion, which blinds him that hee cannot apply that knowledge: After the act hee remembers the fault, and begins to repent.

He falls into this vice by } Heedlesnesse, as not willing to forecast his danger
} Infirmitie, as not able to resist his Passion.

Falls from infirmitie are lesse curable, then falls of headinesse, sith the one comes from a debility of nature; the other but from an heat of Passion.

XLI. Of Patience.

This differs from Fortitude, as Continence from Temperance: The act of it is bearing of harmes, but with griefe and trouble of minde.

Hence it is no perfect Vertue, sith vertue must be } With Joy.
} Voluntary.

Excesse.

Meane.

Defect.

Stoickish obduration: The *Spartans* }
used their children to it in beating them, }
yet not suffering them to lament.

Patience. } Impatience: A wo-
manish yeelding to un-
avoydable evils.

XLII. Of the Heroicall Spirit.

THis riseth a degree of Eminence above the rest.

It differs from other vertues as heate from warmth.

It extends it selfe to a }
1. Of understanding: so the famous Lawgivers
and speciall Sages are Heroicall.
2. Of Grace: so excellence of faith is Heroicall.
3. fold Eminence; }
3. Of Morall behaviour.

It is grounded on a }
Strong composure, and temperature of Body.
Strong composure of Mind.

It is set forth by 3. helps, }
1. Many abilities for Action,
2. Constancy of Continuance.
3. Prosperousnesse of Successe.

The opposite of it is Savagenesse: A generall falling from all good duty without judgement to know, or will to with the contrary.

These are the Catalogues of Vertue. Vertue tempers Passion. Passion gets his meane from Wit, and Will: And these intend for their felicity.

Deiue inoffensa visa mibi tangere metum.

FINIS.

- | | |
|--|------------------------------------|
| 1 W hat Ethicks is. | 21 Of Anger. |
| 2 Of the particular end of Ethicks. | 22 Of Maligning. |
| 3 Of universall ends thereof. | 23 The efficient cause of Vertue. |
| 4 Temporall Happinesse. | 24 Of Conscience. |
| 5 Things required to Temporall Happinesse. | 25 Of Consultation. |
| 6 Stoicks Tenets of Happinesse. | 26 Of Prudence. |
| 7 Of Passions in generall. | 27 Of the Will. |
| 8 The divisions and number of Passions. | 28 The formall causes of Vertue. |
| 9 Of Love the first passion. | 29 The severall kinds of Vertue. |
| 10 Of Desire the second passion. | 30 Of Temperance. |
| 11 Of Hope the third passion. | 31 Of Content. |
| 12 Of Boldnesse the fourth passion. | 32 Of Modesty. |
| 13 Of pleasure the fifth passion. | 33 Of Magnanimity. |
| 14 Of Hate and detesting. | 34 Of Fortitude. |
| 15 Of Despaire and Feare. | 35 Of Justice. |
| 16 Of Griefe. | 36 Of Liberality and Magnificence. |
| 17 Of Shamefastnesse. | 37 Of Courtisie and Cheare. |
| 18 Of Repentance. | 38 Of the grace of Carings. |
| 19 Of Pity. | 39 Of Emulation. |
| 20 Of Zeale and Iealousie. | 40 Of Continency. |
| | 41 Of Patience. |
| | 42 Of the Heroicall spirit. |

FINIS.

